A Lecture
ON
RICKETS.

Delivered at the Sheffield Medical School,

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GENTLEMEN,—Rickets is a most common disease in Sheffield. In both departments at our public institutions we see rickety patients by the hundred flocking year after year for relief; we see our surgical brethren constantly performing difficult and delicate operations to remedy the deformities caused by the disease; in fact, wherever we go, in private and in hospital practice, we are constantly meeting with children having enlarged ankles and wrists, bent bones, small chests, and enlarged heads; this complaint seems to be on the increase rather than the reverse. We know of many other diseases produced by want of attention to diet, &c., some of which actually become at last hereditary. Take scurvy, in which there is a tendency to hæmorrhage everywhere, especially from the mucous membranes. It is now well understood that scurvy is produced by the want of a proper admixture of vegetable with animal food Not only do we meet with the extreme cases so much written about, but we often see others of slight scurvy in our own practice which never strike us as being examples of this complaint. I wish particularly to draw attention to this fact. These patients look pale, sallow, and anæmic, and are quite disinclined for bodily or mental exertion. They have aches and pains in their limbs and back. The gums are spongy, red, and swollen, and bleed every morning after the tooth-brush has been applied. They often suffer from hæmorrhage from the lungs and other parts, giving rise to suspicion of other complaints—for instance, when from the lungs, of phthisis. They also often suffer from neuralgia. These symptoms are present for months in slight cases before the petechial spots appear, and we are very apt indeed to look upon them as cases of anæmia, incipient phthisis, or other diseases; for we believe we seldom meet with examples of scurvy. Yet, looked for in its incipient form, when produced only by partial exclusion of vegetables from diet, it is astonishing how many cases of scurvy, especially in hospital practice, will be met with in a year which are relieved at once by taking a proper quantity of vegetable with animal food. Man by nature was always intended to take both vegetable and animal food; for evidence, look at the teeth.

Here we have an example of a disease affecting nearly every organ and part of the human body, and produced by exclusion of certain food from diet. The gouty patient takes too much nitrogenous and too little vegetable food for the amount of exercise he has. With what result? An accumulation of lithic acid &c. in the blood, which the alkaline vegetable salts would have assisted in carrying away. In the majority of such cases, if we prescribe less nitrogenous and more vegetable food, and enjoin more physical exercise, the disease will disappear. But we all know how difficult, nay almost impossible, it is for the latter class of patients to give up their indulgences. Rather than do so, they will still continue to enjoy life at the risk of suffering from frequent attacks of gout. Long persistence in these habits will at last affect the system to such an extent that the disease is conveyed to the children; it becomes hereditary. Here we have an example of disease produced by the introduction into the body of too much of one kind of food for the amount of physical exertion undergone, probably also too little of the other kind containing much of what is required, as a rule, by that class of patients for the nutrition of the nervous system, which has most of the work to do.

Rickets has been artificially produced in animals and man by giving certain improper diet by Dr. Jules Guérin. He first of all allowed a certain number of puppies of the same litter to suck the mother. He then began to feed one-half of them on raw flesh, the other half were allowed to suck. In a short time those which had been weaned became dull, disinclined to move about, and very sick, and at the end of four or five months presented nearly all the symptoms of rickets, deformed limbs &c. Those which had been allowed to suck became healthy and strong. Thus proving that even for a puppy up to a certain age there is no diet like its mother's milk. You might feed these animals on raw flesh and other food which you may think will supply what is required for the nutrition of the body, and the animal will gradually waste away before your eyes. Milk, and milk only, is the proper diet for the age during which animals and man should suck, and we may supply what we in our wisdom think will do just as well—the essence of beef or mutton made in different ways, the flour made from oats under different appellations: farinaceous food &c.,—and we shall find that the human stomach at that age cannot properly digest such substances, and will revolt in some way or other; hence we see that disturbances will occur, and a general state of debility or disease is the result.

Bone is composed of 67 per cent. of earthy and 33 per cent. of animal matter, and in healthy children we find 37 per cent. of organic and 63 of inorganic matter; whereas in rickety children the proportion is 79 per cent. of organic to 21 of inorganic matter. Thus in rickets the quantity of inorganic matter has been diminished by one-half. Chossat fed animals on food free from phosphate of lime, and produced softening of the bones. Milne Edwards found that the bones of animals purposely fractured united much more rapidly in those animals to which phosphate of lime had been administered than in those to which that remedy had not been given. Fractures occurring during pregnancy unite much more slowly than at other times, no doubt because a quantity of the phosphate of lime is diverted for the ossification of the fœtus.

Rickets generally occurs during the first and second years of life, at a time when a quantity of lime is required for the growth of teeth. There may be diversion from bone caused in this way. Some—as MM. Marchand, Otto, and Weber—believe that there is lactic acid in bones in excess, that this dissolves the phosphate of lime, which is then carried away and excreted. M. J. Drivon found on analysis that bones of rachitic patients actually contained lactates. Of course it is difficult to prove why the phosphates are carried away when deposited. In this disease it is evident that there is a deficient quantity of lime deposited in the bone, but also that the bone already deposited is often taken up again and carried away, for we often find that bones which have been solid become very soon quite pliable when this disease begins; but it is difficult to show how this is brought about.

Let us now consider some of the ordinary cases we meet with in hospital practice, and see whether the experiments and facts I have just mentioned do not throw some light upon the causation of rickets in children. Whether the disease is not in fact, to a certain extent, caused by the administration of improper diet.

In one case the mother may suckle her child, and frequently continues to do so until it is fifteen or eighteen months old, or indeed sometimes until it is two years old. During all this time the child is fed upon milk which is generally, from maternal causes which I shall enlarge upon later on, not nutritious, containing but little of the albumen, fat, &c., which the child requires for the building up of new tissues. This improper milk tends to produce dyspepsia, griping pains, diarrhœa, &c. The child cries from pain, but often more especially from want, and gets, in answer to its cries, dill-water, soothing syrup, castor oil, grey powder, teething powder, &c. These remedies given unnecessarily tend to aggravate the mischief, and at last rickets and other diseases are induced. Generally speaking the mother in such cases is not satisfied with giving her own milk, but positively gives beef, mutton, pork, veal, cheese, vegetables, and other food; in fact, the mother says, "We generally give the poor little thing a little of whatever we have on the table, doctor, and still it gets no stronger." Of course, the child cannot digest such things; then follows intestinal derangement, with other diseases which come on in consequence. In many of the large towns of England, when mothers cannot suckle their children, the milk which is supplied is of very inferior quality, and much watered before it is delivered to the customers. This milk does not satisfy the child, which, being starved, continually cries for more. Then, again, when milk is supplied in large towns it is not fresh; lactic acid has been formed in it, and in all probability this tends to derange digestion, induce debility, and at the same time perhaps, as before explained, to diminish

the supply of lime. In many parts there is a deficiency of lime in the natural drinking-water; in this case, of course, the bones must suffer and become more pliable. In addition to improper food, in large towns the want of pure air is a great factor in the production of rickets. Owing to this want proper and healthy nutrition cannot take place in a body which is being built up.

The diet and habits of life, especially among the poor, are not conducive to health. The fœtus is consequently born with an innate tendency to disease. For breakfast the mother takes a little bread-and-butter, three cups of tea, and perhaps two tablespoonfuls of milk. For dinner she may have meat and potatoes, but frequently nothing of the kind. She says, "You know, doctor, it is not worth while cooking a dinner when my husband is away, so I generally have bread-and-butter, with half a pint of tea or a gill of ale." For tea bread-and-butter again, and for supper bread and cheese, or perhaps tea and bread-and-butter. Such mothers generally live in an atmosphere full of smoke and other impurities, and hardly ever stir out of the house except to go shopping. They often have many children, and dare not leave them at home alone. Their teeth decay early. It is astonishing how seldom you meet with a patient possessing anything like a good set of teeth among that class. This, of course, tends to aggravate the mischief already commenced by taking improper diet, living in an atmosphere full of impurities, and not taking enough exercise in the open air. A chronic state of gastritis is in this way induced; for we all know that tea taken in large quantities ultimately has an injurious effect upon the gastric mucous membrane. The bolting down of food which has not undergone proper mastication and insalivation adds to the mischief. By starvation, by imperfect mastication and digestion of what food is presented to the stomach, a general state of debility is brought on in the mother, which often ends in the production of disease, and most decidedly has a prejudicial effect upon the child; for we know very well that in parturient women great changes are going on in the system, and a great amount of nourishment is required for her own supply, as well as that of the fœtus.

The father probably has not much, if any, influence in the production of rickets. Indeed, I do not look upon rickets as a strictly hereditary disease, like syphilis and scrofulosis. Many maintain that rickets is hereditary; Wiltshire and Herring are of this opinion. Sir W. Jenner does not believe in its heredity. Too early marriages and intermarriages no doubt tend to produce the disease. Patients who suffer from any chronic weakening disease, who have indulged in excesses of different kinds, and who are old, often have rachitic children. Some say that it is simply a degenerate form of syphilis, but Sir W. Jenner, who has paid special attention to this subject, points out the fact that syphilis is generally begotten before marriage, and that the first children born after marriage suffer from syphilis, whereas in rickets the first-born are often healthy, and the later born suffer from rickets, because "among the poor the patients are generally worse fed, worse clothed, and worse lodged, the larger the number of children," as Sir W. Jenner observes. Among the rich the greater the number of children the greater the mother's health has deteriorated often.

The symptoms of this disease may begin to be evident towards the end of the first year, or more generally during the first six months of the second year, sometimes as early as the fourth or fifth month; sometimes later than the second year, but not often so. The appetite begins to fail, symptoms of indigestion present themselves, sometimes there is constipation, sometimes diarrhœa. The motions are pale and without bile, or of a brownish colour, in either case very offensive. The skin is hot, dull and dirty looking, pulse quick, temper irritable, emaciation great. The child, hitherto unable to walk, finds that it has not the strength to do so, now becomes peevish and sad, is not inclined for play, assumes the horizontal position whenever it can, and rolls its head from side to side, wearing the hair on the back of the head off completely. The slightest movement seems to give rise to pain, generally in the joints or elsewhere. The hair on the scalp is thin, the occipital and parietal bones become soft, the head becomes enlarged, and the fontanelles remain open for a long time. Dr. H. Rogers says that ossification takes place between the ages of fifteen months and three years and a half. He also noticed that a blowing sound could be heard in thirty out of forty-seven cases, and from its great frequency he regards this as a sign of rickets. Trousseau says that he always looks with suspicion upon persistence of open fontanelles after two years. The enlargement of the head is not dependent upon hydrocephalus, but upon enlargement of the brain itself. Dr. West says that chronic hydrocephalus is by no means a rare complication. In hydrocephalus the closure of the fontanelles is prevented by eccentric pressure, the effused fluid having previously pressed upon the brain to such an extent as to produce microcephalism, the intellectual faculties are therefore diminished. Symptoms of teething are present, but teeth do not appear. Trousseau says: "When a child a year old suffers from teething without any teeth appearing, I suspect that rickets is threatened, and when the teeth do come they soon become black and carious, loose and ejected. They are generally irregular, late, crowded from want of space in the jaw, and the sockets are imperfect. There is profuse perspiration of the head, or sometimes also of the neck and chest as well; the patient is very restless at night and kicks the bedclothes off even in the middle of the winter. The skin is pale and muscles flabby. On the surface of the urine will often be found a scum somewhat similar to that which is found in the urine of pregnant women. This is, according to M. Gubler, a layer of ammoniaco-magnesian phosphate, in which grows a cryptogamic vegetation after the water has stood awhile. The extremities of the long bones, as at the ankles and wrists, become enlarged, so do the sternal ends of the ribs. The femora become curved, convexity forward, the tibia convex forwards and outwards. The latter do not become bent until walking has been attempted, the former may become bent earlier, the weight of the legs hanging down when the child is on the knee is sufficient to cause the bending, but after walking has been indulged in a few times they usually are bent outwards as well as forwards.

If the disease appears later on in childhood the sufferer becomes knock-kneed or bow-legged. If it has never been able to walk the usual lumbar curve met with in health is absent; and in its place there is found a general posterior curve, extending from the first dorsal to the last lumbar vertebra; but if, on the contrary, it has been able to walk, the dorsal and lumbar curves are increased. The cervical curve is so increased that the face in consequence is directed upwards to a certain extent. The thorax is very much deformed. There is a concavity beneath each axilla, instead of a rounded wall of chest. The sternum is pushed forward, the sides of the chest flattened, the softened ribs having fallen in, except below, where they are pushed outwards, being supported by the underlying liver and spleen, and over the region of the heart, which also acts as a support and prevents the falling in of the ribs. There are grooves extending from above downwards on each side of the sternum, corresponding to the junction of the ribs with their cartilages; these extend from the first to the ninth ribs. The base of the chest is very much enlarged, for it is supported or pushed outwards by the liver on the right side, the spleen on the left, and the stomach when full in the middle, which organs are kept up by the intestines below. The ribs, being softened, give way, and are pushed outwards. In this class of patients you will find abdominal respiration great. Owing to the contraction of the diaphragm, the liver and spleen, which in health only partly protrude below the margins of the lowest ribs, are pushed down more into the abdomen, and, even if not enlarged, at all events appear to be so. Trousseau denies that they are enlarged at all, and says that the enlargement is only apparent, because they are pushed downwards. The abdomen itself is much enlarged, and this increase in size is, to a certain extent, caused by want of tone of the intestines. There is increase in size of veins in these cases, owing to the deficient respiration consequent on the much diminished size of the chest. The clavicles are much shortened owing to their curvatures being increased, so the shoulders are drawn nearer to each other than in health. The humerus is generally curved forwards and inwards, so also are the radius and ulna with their concavities towards the palmar aspect. In the pelvis, the ischia are approximated by the pressure of the femur on either side. The ilia are pushed outwards by the weight of the intestines above. This tends of course to make the abdomen look large. The child is rather dull; but as it cannot play like other children, it is obliged, on the contrary, to be constantly seated, or laid if very ill; it is pitied and petted by its elders, with whom it is in constant contact. It therefore assumes their habits, manners, and language, becomes, in fact, old-fashioned. I certainly have met with cases in which the children are precocious and

clever, and continue to be so as they advance in life, and this often runs in families. The emaciation increases, the abdomen becomes more and more enlarged, the diarrhœa continues, the motions being very offensive; the pains in all parts of the body are so great that the patient can hardly move; the perspirations increase. Enlargement of liver, spleen, mesenteric, and lymphatic glands may now occur from albuminoid infiltration. The skin becomes pale, waxy, transparent, or sometimes assumes a greenish-yellow hue; often there is infiltration of serum into the subcutaneous cellular tissue, and at last death may occur in several ways. Acute bronchitis, congestion of the lungs, or pleurisy, may suddenly come on, and carry off the patient. The diarrhœa may increase, and death may occur from debility consequent thereon, or indeed it may take place in consequence of constantly increasing debility alone. Laryngismus stridulus is often fatal in rickets, and sometimes hydrocephalus, with convulsions, assist in causing death.

In other cases all the unfavourable symptoms may gradually disappear, and the child becomes quite vigorous. The bones often become straightened to an astonishing extent, without any surgical aid whatever in many cases; and when not quite straightened they become very firm, the ends of the bones relatively diminishing in size.

Rickets does sometimes attack the fœtus in utero, and children have been born having curvatures somewhat similar to those met with in the extra-uterine cases, thus showing that these curvatures are not produced entirely in the legs and arms by either of them having to support the weight of the body. Intra-uterine fractures, with partial consolidations of such fractures, have also been met with.

In all these cases there is excessive development of the cartilaginous ends of the bones, but the process of ossification is delayed and incomplete. There is a tendency to calcification of the cartilage cells, which seem to be converted into lacunæ, with their branching canaliculi before the surrounding matrix. There is excess of the spongy tissue of the ends and heads of bones, the cancelli of which contain dark-red pulp containing blood globules, colourless nucleated cells, and fat cells. The periosteum is much more thickened and more vascular than in health. Some say that the animal matter is altered, and that on boiling the bones no gelatine had been obtained. The bones become so soft that they can be cut with a knife or bent. In consequence of this softened condition of bone generally, we have the several deformities which have been described among the general symptoms. Trousseau says "that rickets and scrofula are not only not a manifestation of the same diathesis, but that as a general rule the one excludes the other." The scrofulous patient is often taller than other children, the rickety patient is shorter. In the former the limbs are well developed and the joints well knit unless from white swelling, whereas in rickets the bones are bent and their ends enlarged. Scrofula occurs generally after the second year, rickets before, as a rule. The abdominal symptoms do not appear before the ages of four or five, whereas in rickets before the age of two. In the former disease tubercles are generally found after death somewhere, but not in rickets.

Provided that some of the symptoms of rickets begin to show themselves during the first nine months, and the mother be suckling the child, the first question to decide is whether she ought to suckle or not. In nearly all cases the fact of the child being rickety is quite sufficient evidence that the mother is not in a fit state to suckle. It is customary to wean children at the age of nine months, but rickety children, as their development has been retarded, should suck a little longer. In a great measure the development of the teeth will guide you and tell you when the child is prepared for other food than that from the breast. Rickets is most frequently met with amongst the poor and ill-fed. In such cases of course a wet nurse is out of the question, and then the child ought to have a reasonable amount of cow's milk, to which should be added from one-sixth to a quarter or more of its quantity of water, as a certain quantity of cow's milk contains more albumen, fat, &c., than that of a human being. It is advisable to have water at hand which has been previously boiled and then allowed to cool for this purpose, for obvious reasons. The quality of the milk can be roughly judged of by taking its specific gravity, which should be about 1030. This gives a fair idea as to the quantity of solids. By placing a certain quantity in a test tube or a proper lactometer and allowing it to stand for a day a proper estimate may be formed of the quantity of butter. The younger the child the greater the quantity of water required to be added. At first, if the milk is good, equal quantities of milk and water should be given, but the quantity of water given must be diminished as the child gets older. Careful notice taken of its growth and desires, as indicated by its cries, will in the majority of cases show whether the quality of milk is good enough. Many parents are in the habit of adding to this mixture of milk-and-water a certain amount of sugar. As the milk is already sweet enough and as the water only should be sweetened, I think the sugar may be dispensed with altogether.

Beef-tea, gravy, corn-flour, and other foods are often given during the first nine months; but I maintain that in all cases milk-and-water alone is the best food for a child at that time of life. Children are often sick, suffer from pain and flatulence, or become relaxed when taking milk, and then we are tempted to try other articles of food. While these other articles of diet are being taken, all the unfavourable symptoms will often disappear. Giving the alteration of diet the credit, we then persevere with the fresh diet for a time, until we find that the child does not thrive, for no one article of diet but milk contains everything required for the building up of a human body. When such symptoms are present it is necessary to see that the milk is good and fresh, that the bottle and tube have been properly cleansed after each meal, that the child has its meals at regular hours, say every one and a half or two hours, that neither too much nor too little is given at a time (experience will teach how much is required in each case), and that the child is not allowed to suck at the bottle when empty, in fact, often to suck itself to sleep. Mothers are very apt to give their children more food every time they cry. Swiss milk seems to suit some children well, and agrees when ordinary milk will not. Pepsine powder given with the milk will promote digestion if you think that there is not a proper supply secreted by the stomach. As the child gets older, and as digestion of food becomes easier, other food should be given in addition to milk: bread, biscuits, oatmeal, fish, boiled fruit, rabbit, and, at last, mutton and beef.

Milk, when taken by an infant, is frequently coagulated into large lumps, into the interior of which the gastric juice cannot possibly penetrate for the purpose of acting upon it. This most frequently takes place when the milk has been kept for some time. A goodly portion of this milk passes away into the bowels undigested, and thus the child is really deprived of a good quantity of the food which has been given to it. This is not all, for this food, which ought to have been digested in the first portion of this long canal, now irritates the bowel in its passage downwards, giving rise to pain, flatulence, diarrhœa, and a chronic inflammatory state of the whole intestinal canal; in fact, if the stools be examined, large lumps of undigested coagulated albumen, white in colour, will be found. For this lumpy coagulation, I know of no remedy better than lime water; but should the bowels be constipated, a little of the bicarbonate of soda will be indicated instead. Lime water not only acts beneficially in this way, but it also supplies to the body what is a constituent of all the hard and soft tissues of the body, not only bone, but also nerves and muscles. A remedy I strongly recommend in these cases is the phosphate of lime in small doses, frequently repeated. As it supplies lime for the solidification of bone, it supplies what is much required by a body in which there is great activity of cell growth, and what also is required to supply the foundation for new tissues. Strange to say, wherever there is rapid growth of cells in health, or even in disease, there phosphate of lime has been found in excess, and even in organs which afterwards have an excess of carbonate of lime, as the shells of animals, a certain quantity of the phosphate of lime has been required to supply the first basis. It is therefore a material of prime importance, especially in a body which is being rapidly developed.

It has been stated that we have as much right to treat diabetes by giving sugar as to give phosphate of lime in cases in which there is excess of phosphate of lime in the urine; that there is not a deficient supply of lime in the food, but deficient assimilation of lime by the tissues which require it, and that we should direct our attention to this mal-assimilation. With regard to the first objection, the two cases cannot be compared, as in diabetes we have immense formation of sugar from other constituents of food, even when sugar has not been given in any shape or form; whereas in rickets the phosphate is already present as such, and is excreted; and, again, there does not seem to be any great excess of this material in the urine. With regard

to the second objection, we must remember that there often is a deficient supply of lime in the water, and that in consequence of this, we may be sure that there is a deficient quantity of it in any food the child may have, either from the mother or cow; that the mal-assimilation to a certain extent is dependent upon the presence of excess of lactic acid in the milk, which has generally been kept for some time, and that lime tends to counteract this; and, again, we have reason to believe that the phosphate of lime tends to control defective and perverse nutrition which is present in rickets; and as a proof of its efficacy I may recall what I have already stated:—1st. That rickets has been produced in animals by feeding them on food free from phosphate of lime. 2nd. That fractures purposely produced in animals united much more readily in those to which the phosphate of lime had been given than in those to which the remedy had not been given.

Cod-liver oil has been strongly recommended as a remedy in this disease, and is a very valuable one. It should be commenced in very small doses, for it is very apt in these cases to give rise to acidity, to derange the stomach, and produce griping pains and diarrhœa. I think that we are too fond of giving cod-liver oil, not only in this disease but in others, in too large doses, in doses which the tender stomach cannot tolerate, and that if we commenced by giving small doses, then increased the quantity if it is well tolerated, we should find that our patients would derive much more benefit than they do, and that the injurious effects of the remedy upon the intestinal canal would be avoided. If oil globules are found in the stools, it is a sign that all the oil prescribed is not digested, and the excess is hurtful.

Wherever there is much growth or nutrition going on, wherever there is rapid cell growth in health or in disease, there is abundance of fat, showing that it is necessary for its promotion. In these respects it is very like the phosphate of lime, but frequently it cannot be tolerated. Fat must then be given in other forms, as cream &c. Among the rich the disease is produced in a somewhat similar manner. In this disease patients should not be encouraged to walk early. Let the general health be improved by diet, medicine, fresh air, baths, &c., and let the bones solidify before the weight of the body is allowed to be put on the lower extremities or the upper part and spine upon the upper extremities, or the bending of bones will be increased. Of course, I say nothing about the surgical treatment of such disease. The compound syrup of the phosphate of iron is a remedy which may be prescribed with great advantage, more especially if the lips are pallid, as they generally are in these cases.

ON THE

MITRAL PRESYSTOLIC AND A MITRAL DIASTOLIC HEART-MURMUR.

By AUSTIN FLINT, M.D.,

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THE LANCET of Jan. 27th, 1883, contained an abstract of a clinical lecture by me on the Occurrence of the Mitral Direct or Presystolic Murmur without Mitral Lesions. In connexion with that lecture a specimen was exhibited in which aortic lesions with valvular insufficiency existed without any mitral lesion. In the case which furnished this specimen, a well-marked mitral direct or presystolic murmur had been observed by others as well as by myself. In 1862 I reported several cases in which a well-marked mitral presystolic murmur had been observed, and after death no mitral lesions were found, free aortic regurgitation having existed in all these cases. So far as I know, instances of a presystolic murmur without any mitral lesion had not been previously reported, and I have not met with a report of similar instances in medical literature up to the present date. In the lecture referred to, and in other publications, I have ventured to explain the mechanism of the murmur when produced without mitral lesions. Dr. Balfour, in his work on Diseases of the Heart, after stating that a presystolic murmur always denotes constriction of the mitral opening, refers to my observations in a footnote, as follows:—"I have no hesitation in making this statement, notwithstanding that Professor Flint says, 'I have recorded three cases in which this (presystolic) murmur was loud, and the mitral valve was found, post mortem, normal. In each of these cases there were aortic lesions, rendering the aortic valves insufficient.'[1] Obviously Flint had not timed these murmurs correctly, for a murmur depending on aortic regurgitation is always diastolic, and, therefore, has a rhythm very different from a presystolic murmur. But even without timing these murmurs, they have each of them such a distinctly different character, that no one perfectly acquainted with the presystolic murmur could ever mistake a diastolic aortic murmur for it."[2] In another place[3] the author refers to me in connexion with the discrimination of a presystolic murmur, as follows:—"Nay, want of precision in this matter has led even a man of so much experience as Professor Flint to describe as presystolic murmurs which must have been diastolic in rhythm."

Now, I should not take pains to substantiate my ability to discriminate a mitral presystolic from an aortic regurgitant murmur, were it not that upon this ability rests the validity of my statement (which I suppose to be original) that, in connexion with free aortic regurgitation, a mitral presystolic murmur may exist without mitral lesion. In view of this consideration I hope it will not seem indelicate for me to state some facts in order to show that I may fairly claim to be able to recognise, by its rhythm and distinctive characters, a mitral presystolic murmur. I was the first, as I believe, to recognise this murmur in my publication on this side of the Atlantic. I referred to it in a prize essay on "The Clinical Study of the Heart-sounds in Health and Disease," published in 1852. It was embraced among the organic murmurs in the first edition of my work on the diseases of the heart, published in 1859, and more fully described in the second edition published in 1870. In an article published in the *American Journal of Medical Sciences*, July, 1862, on "Cardiac Murmurs," after stating that for many years after I had begun to devote special attention to cardiac operations I committed the mistake of confounding it with the mitral regurgitant murmur, seven pages were devoted to an account of the mitral presystolic murmur. The differential points involved in the discrimination of the latter from an aortic regurgitant murmur were stated fully. The characteristic quality was described, and the name "blubbering" was applied to it. Dr. Balfour refers to this article, but either he could not have read it with care, or he had forgotten it when he assumed my inability to recognise this murmur. The murmur is described in the first edition of my work on the Practice of Medicine (1866), as well as in all subsequent editions, also in my work on Clinical Medicine (1879), and in the first edition of my "Manual of Auscultation and Percussion" (1876). Moreover, for more than twenty years in clinical teaching I have been accustomed to point out this murmur to medical students and practitioners. My field of observation has been large. It is not an exaggeration to say that more than five hundred examples have come under my observation. Several examples may, at any time, be found either within the wards or in the out-door department of Bellevue Hospital.

Claiming, therefore, that I am sufficiently familiar with the mitral presystolic murmur to recognise it, I claim, in opposition to Dr. Balfour's statement, that this murmur does not invariably denote mitral lesion, but that in certain cases, when associated with aortic lesion, giving rise to regurgitation, it may exist, its characters being well marked when the mitral valve is perfectly normal, and I refer to the cases which I have reported as proof of the correctness of this statement.

Now, as to the mechanism of the presystolic murmur when not dependent on mitral stenosis. My explanation assumes that the murmur, as it is usually heard, is produced by vibration of the mitral segments. The characteristic quality supports this view of its production. The terms vibratory and blubbering express the characteristic quality of the murmur. It may be exactly imitated by throwing the lips or the tongue into vibration with the expired breath. Moreover, this method of its production may be demonstrated by the following experiment. Take an indiarubber bag with thin walls, of the size of a small orange. The little bags which when inflated form the toy balloons for children are well adapted for this purpose. Attach the mouth of the bag to the efferent tube of Davidson's or Higginson's syringe. At

[1] Lectures on Diseases of the Heart. Philadelphia, 1870.
[2] Second edition, p. 165.
[3] Page 116.

the other extremity of the bag make a button-hole opening. Place the bag and the efferent tube of the syringe in a basin of water. Insert the afferent tube of the syringe in the same basin, or in another containing water. Force the water by compressing the bulb of the syringe into the india-rubber bag, and through the opening, and apply the pectoral end of the binaural stethoscope upon or near the bag. The vibration of the walls of the bag as the water passes through the opening gives a perfect imitation of the presystolic murmur, and to the touch a *frémissement cataire*.

Attributing the presystolic murmur to the vibration of the mitral segments, it is easy to understand that this vibration takes place when the segments are adherent to each other, leaving a button-hole opening, the segments remaining flexible. The *frémissement cataire*, so often associated with the mitral presystolic murmur, corroborates the explanation of the production of the murmur. It is also, as it seems to me, easy to understand that vibration of the mitral segments may take place without mitral stenosis, if, when the auricular systole takes place, the left ventricle be already filled with blood. This ventricle is filled with blood at that time if, added to the blood, which flows into the ventricle from the auricle before the auricular systole, there be a large or considerable regurgitant flow from the aorta owing to insufficiency of the aortic valves. The mitral segments must then be brought into close coaptation, and they are made to vibrate by the current which is forced between them by the contraction of the auricle. It is under these circumstances that the presystolic murmur occurs without mitral stenosis. With reference to this explanation, Dr. Balfour remarks as follows:—"Flint's theory that the regurgitant blood floats up the segments of the mitral valve and produces a practical constriction of the opening, is obviously no explanation. In the normal state of the heart 'the segments of the valve at the end of the ventricular diastole are so close as to be nearly in contact.'[4] According to Flint's theory a presystolic murmur ought to be a constant phenomenon not only in all cases of incompetence, but also in health."

The question is not what ought to be, but what is the clinical fact. In the foregoing quotation it is stated that at the end of the ventricular diastole the segments of the valve are so close as to be nearly in contact; but in cases of aortic regurgitation these segments are not nearly, but absolutely, in close contact. Physiological experiments show that the mitral orifice may be fairly closed by injecting a liquid from the auricle into the ventricle, having previously ligated the aorta and coronary arteries. The exact similarity of the murmur when it occurs without mitral lesion to the murmur when it represents mitral stenosis, shows the mode of production to be the same—namely, by vibration of the mitral segments. The condition of the left ventricle at the end of the ventricular diastole in health differs widely from the condition when there is free aortic regurgitation; but why the presystolic murmur is not oftener present than it is in cases of aortic regurgitation, I am not prepared to explain.[5] If, however, Dr. Balfour will direct his attention to the occasional occurrence of the murmur without mitral lesion in some of these cases, I doubt not he will, in the course of his continued clinical experience, meet with examples.

Dr. Balfour refers to a murmur produced by the current of blood from the left auricle into the left ventricle, in cases of stenosis, at the beginning of the ventricular diastole—that is, prior to the presystolic murmur. Peter, in his late work, describes this murmur as of two kinds—namely, *un bruit de souffle diastolique*, and *un bruit de roulement diastolique*, the latter being much more frequent in its occurrence.[6] These murmurs are produced by the gravitation of the blood, owing to the situation of the auricle, and by a *vis a tergo* incident to auricular distension, before the muscular contraction of the auricle takes place. I have, as I believe, verified repeatedly these murmurs, mitral in their source, and preceding the presystolic murmur. They have been confounded with aortic regurgitant murmurs, from the fact that they are the same as regards rhythm. They are not, however, heard in the same situation as the latter—that is, at or just below the base of the heart. Their situation is at or just above the apex of the heart. The question arises, By what name shall these murmurs be distinguished? The name mitral diastolic murmur, in contradistinction to the name mitral presystolic murmur, seems to me an appropriate and convenient designation.

[4] Pettigrew, Trans. Roy. Soc. Ed., vol. xxiii., Part 3, p. 796.

[5] The explanation may be that for the production of the murmur without mitral lesion a certain degree of hypertrophy of the left auricle is requisite. Peter supposes that a presystolic murmur always implies more or less hypertrophy of the left auricle.

[6] Traité Clinique et Pratique des Maladies du Cœur. Par Michel Peter. Paris, 1883.

NOTES OF

THREE CASES OF ARSENICAL POISONING.

By WILLIAM WHITFORD, M.D.,

HONORARY ASSISTANT SURGEON, LIVERPOOL CANCER AND SKIN HOSPITAL; HONORARY ASSISTANT SURGEON, STANLEY HOSPITAL.

IN my capacity of district medical officer to the parish of Liverpool I was called to see Thomas Higgins, aged forty-five, on Sept. 25th, 1883, as a probable case of fever. On examining him I found his temperature and pulse normal. He stated to me that he had diarrhœa and felt "sickish," and that he had been drinking for a couple of days. He smelt strongly of drink. I ordered him a full dose of castor-oil, to be followed by a mixture consisting of opium and solution of bismuth. I saw him again on the 29th, and found him weaker, and his temperature subnormal. I observed no direct evidence of drink on this second visit. In the interval between the visits he had taken miscellaneous food, and there was doubt as to his having taken the mixture, at least regularly. There was tenderness on pressure over the lower abdominal region. The patient complained of vomiting and "bad" diarrhœa. I gave directions to him to take a strict milk diet, and substantially continued the medicinal treatment. On Oct. 2nd, three days after my last visit, his wife called at the parish surgery, and told me that he had just died, and requested a certificate. I was surprised to hear of his death, as I had looked upon his ailment as a comparatively trivial one. I closely questioned her as to his symptoms before death. She stated that he had frequent "bloody stools," and that he died suddenly. I gave a certificate, assigning dysentery as the cause of death, although I had no definite opinion as to the exciting cause of the dysentery. On the evening of Oct. 3rd Patrick Higgins called on me, and stated that his brother, Thomas Higgins, had been heavily insured by his widow and her sister, Catherine Flannagan. On hearing this my suspicions were first aroused, and I directed the brother to call on the coroner, and to insist on an investigation being held. I called the following morning, and told the coroner that I had grave suspicions of foul play. The coroner declined to act himself, but gave me verbal permission to make a post-mortem examination to verify or set at rest my suspicions, and directed his beadle to accompany me. After examining the body as described below, with the assistance of Dr. Limerick, I gave directions for the funeral to be stopped, and placed a policeman in charge of the room. I may here mention some symptoms and circumstances immediately preceding death which were sworn to during the recent trial. The deceased spoke of figures on the wall and around his bed, and yet a few minutes before he died he refused a drink offered by Mrs. Flannagan, and subsequently took water offered by a stranger. He sat erect in bed whilst he drank it, and, having said "God bless you" to her, lay down and died. The vomiting, purging, and consequent thirst were marked symptoms for the last two days.

The post-mortem examination was made on Oct. 4th, fifty-eight hours after death. Rigor mortis had disappeared, and slight discolouration was noticeable. The conjunctivæ were free from any yellowish tinge. On opening the abdomen the following appearances were observed: The peritoneum over its entire surface presented its normal glistening character. On the anterior wall of the stomach, extending from the lesser curvature and nearer to the cardiac than to the pyloric opening, a reddish patch about four inches in area was seen through the semi-transparent walls of the stomach. The duodenum was intensely inflamed, and it was separated with difficulty from the pancreas and other adjacent structures. The intestines, which were remarkably free from contents, had patches similar to the one described in the stomach. There were six on the small and two on the large intestine, and these were scattered at irregular intervals over the tube. A most remarkable "cord-like" condition of the intestines was observed in parts for about two inches in length. There were three such cord-like con-

tracted portions in the small and two in the large bowel, and they presented no constant relation to the patches described. The mesenteric vessels presented an injected appearance in several places, but there was no visible continuity with these vessels and the inflamed patches of bowel. Except in the portions described, the bowels were paler than normal. The stomach, being tied at either end, was removed unopened and placed in a clear jar. The intestines were similarly treated. The portal vein and its tributaries were empty, and the viscera generally were more bloodless than normal. The liver had a darkish appearance, but otherwise appeared healthy. The gall-bladder was empty, and there was no biliary or other staining matter in the adjacent viscera. The spleen was enlarged and cirrhotic. The kidneys were deeply congested, presenting a dark colour throughout the entire section. The pyramids were unusually well marked. The bladder was empty, and presented no abnormal appearance. The lungs were pale, and there was no noticeable hypostatic congestion in the depending portions. The heart was firmly contracted, and contained no blood in its several cavities. The left ventricle had a darkish appearance on its inner surface, very pronounced in parts. The main blood-vessels were free from clots or other contents. The pleura and pericardium were normal. The brain and its membranes presented in a marked degree the bloodless condition which characterised the various organs of the body, with the exception of the kidneys and the endocardium of the left ventricle. The veins and sinuses were almost empty. No other abnormal appearance presented itself in the cranial contents. A portion of the liver, the spleen, one kidney, and the heart were removed from the body, placed in a jar, and sealed. On Oct. 6th I made a detailed examination of the stomach and bowels and their respective contents in the laboratory of Mr. Davies, and in his presence. On opening the stomach we found about two ounces of fluid contents having no distinctive smell or colour. The inflammatory patch already noticed was confined to the mucous membrane. There were no adhering solid particles on its surface or in its vicinity. The inflammatory condition of the duodenum rendered it easily torn, but the peritoneum covering it in part was unaffected. The intestines generally had little gaseous or other contents, and the small amount of semi-fluid matter presented no abnormal appearance. The dark-mahogany-like patches were about the size of a florin, and, as in the stomach, the mucous membrane alone was affected. The rectum was empty, and the vessels supplying its mucous membrane were somewhat injected. Through the cord-like portions of the bowel a small probe was passed. The lumen of the tube was thus shown to be not entirely obliterated. These cord-like portions were paler than the adjacent bowel, and as I have already stated, there was no apparent relation between these and the inflammatory patches. We examined microscopically with a low power one of these patches for crystals of arsenious acid. I had formed a strong opinion from the symptoms and the pathological appearances that arsenic had been the poison administered, and in consequence I requested Mr. Davies to first determine if it were present in any of the viscera. He found arsenic by Reinsch's test in the liver, kidney, spleen, stomach, and intestines. Quantitatively he determined that in twenty ounces of abdominal viscera there was one-third of a grain of arsenious acid.

Mr. F. W. Lowndes, Surgeon to the Liverpool Police, and I were jointly commissioned by the authorities to conduct an examination on two exhumed bodies at Ford Cemetery on Jan. 16th, 1884. On our arrival at the cemetery we were shown in the public portion a grave from which a coffin had just been raised. The grave was formed of sand and clay, was about five feet deep, and the coffin, of pine deal, was intact. The coffin plate had on it the inscription "Mary Higgins, died 29th Nov. 1882, aged 10 yrs." The coffin was removed to the mortuary of the cemetery and the body identified in our presence. The grave clothes were entire though soiled, the eyes and part of the nose were destroyed by decomposition, and the face and surface of the body generally were slightly discoloured. The teeth remained in their sockets and the nails adhered to the fingers and toes. The integuments covering the chest and abdomen were intact. The body was that of a female under the age of puberty. On opening the chest we found pleuritic adhesions on both sides, and a large quantity of blood-stained fluid in either pleural cavity. The heart and the pericardium presented no appearance of disease, and their structure was well preserved. On opening the abdomen we found over the greater portion of the large, and lower portion of the small, bowel a bright-yellow staining. The mesenteric vessels were similarly stained, and the mesenteric glands were greatly enlarged. The stomach had a pale-greyish appearance, and on its anterior wall near to the lesser curvature two small darkish patches were observed. It was secured with ligatures, removed unopened, and placed in a jar labeled A. The spleen was much diminished in size, the liver and kidneys were shrunken, and all three were paler than normal on section. They were placed in a jar labeled B. The intestines were removed entire, having been ligatured at either end and placed in a jar labeled C. The pelvic viscera were normal. We next examined the grave in which the coffin stated to contain the body of John Flannagan was placed. It was formed of dry sand and clay, and the coffin was about ten feet below the surface. The coffin plate bore the inscription "John Flannagan, died December 8th, 1880, aged twenty-four years." The pine deal coffin was intact. On removing the coverings from the face of the corpse it was found to be in a remarkable state of preservation and was easily identified. The grave clothes were entire. On the surface of the clothing next to the body there were several black and yellowish stains, which we removed and placed in a box for chemical examination. We then examined the body, which presented only slight indications of decomposition. The features were well preserved with the exception of the cartilages of the nose, which were destroyed. The integuments over the chest and abdomen were intact. On opening the body we found the lungs and heart much shrunken, but otherwise they and their enveloping membranes were healthy and well preserved. The lungs presented a granular feel on section. The stomach was of a whitish-grey colour, and was removed into jar D. The spleen was a mere shred, weighing about a quarter of an ounce. The liver and kidneys were shrunken but well preserved; in fact the latter organs might have been used for an anatomical demonstration. The organs described were placed in jar E. The gall-bladder, as in the case of the child Higgins, was empty, and there was no discolouration in its vicinity. The intestines presented externally throughout most of their length a characteristic golden-yellow appearance. They were tied and removed into jar F. The other viscera presented nothing abnormal. The vessels used were clean glass jars. Each was closed with a glass stopper covered with skin leather, and securely tied. We each of us affixed a private seal to the jars, and all were labeled with the respective names of the deceased bodies and date of exhumation. On the following day (Thursday, Jan. 17th) we attended at Mr. Davies' laboratory, and in conjunction with him and Dr. Campbell Brown we made a more detailed examination of the viscera contained in the jars. Jar A (stomach of Mary Higgins). We found a brownish substance adhering very closely to the mucous membrane, containing some small hard granules. On the removal of this substance several small reddish patches were noticed, chiefly on the anterior wall. Jar C (intestines of Mary Higgins). We examined the bowels throughout their entire length. The golden-yellow appearance was more pronounced on the inner than on the outer aspect. Small reddish spots were distinctly visible scattered over the lower four-fifths of bowel. The mesenteric vessels were deeply stained yellow, and the mesenteric glands were much enlarged. Small hard granules were found in the contents of the bowel. Jar D (stomach of John Flannagan). The walls of the stomach were much attenuated, but entire. Some dark-coloured matter tenaciously adhered to its mucous surface. Two small reddish spots were noticed on the anterior wall. A few granules found. Jar F (intestines of John Flannagan). The intestines presented throughout nearly their whole extent the golden-yellow staining which we had previously observed from the outer aspect. Some granules were found in the contents. The mesenteric vessels were deeply stained yellow, and the mesenteric glands were slightly enlarged. Very small reddish spots were noticed over the mucous membrane, especially at the rectal end. We examined microscopically, with an addition of a drop of acetic acid, the granular particles I have already noticed, and it was shown they were of a phosphatic character, evidently the crystallised products of decomposition. Another problem presented itself for solution. Was the yellow pigmentary substance sulphide of arsenic, or was it of a biliary nature? Dr. Campbell Brown doubted its being an arsenical compound, from the amount present and from its wide diffusion; on the other hand, the stomach and upper portion of bowel

were free from pigmentary deposit. Dr. Brown and Mr. Davies undertook to determine this point, and I may anticipate so far as to state that they have shown, not only by the amount of arsenic present in the respective bodies but by direct chemical tests, that the yellow pigment was not sulphide of arsenic. I may here mention that the abdominal viscera of Mary Higgins contained one grain of arsenious acid, and that of John Flannagan three grains and a quarter. In these cases certificates had been obtained, assigning the cause of death to bronchitis. It was given in evidence at the recent trial that in each case there had been at least a week's illness, and that vomiting and purging were symptoms.

Remarks.—The case of Thomas Higgins presents many points in common with the one reported in THE LANCET of Feb. 25th, 1854, p. 224: "Atlee Family." The bloodless condition of the body, the firmly contracted heart, the enlargement of the mesenteric glands, and the survival of the patient for seven or eight days after the first attack of vomiting and purging, which is most unusual, are common features. On the other hand, the healthy condition of the stomach and duodenum contrasts strongly with the condition of those organs in the case of Higgins. In the case reported by Dr. Wilks,[1] the person died twelve hours after taking half an ounce of arsenic. Dr. Wilks found an ecchymosed condition of the left ventricle and a contracted condition of the colon, which have a striking similarity to the condition of those organs in the adult Higgins. The remarkable "cord-like" contractions of not only the colon, but of the small intestine, in the case of Higgins, point strongly to nervous irritation, and would seem to favour the theory of Esser, that diarrhœa is due to irritation of the intestinal ganglia rather than to paralysis of the splanchnics. Was the firmly contracted condition of the heart due to a similar cause? If so, can we call the mode of death syncope, or shall we attribute the contracted condition of the heart to the want of blood-supply? These are interesting questions, and I do not presume to give an opinion. Dr. Campbell Brown offered an opinion at the trial that the man Higgins had been taking arsenic for several days. His reason was that, considering the quantity of arsenic in the body, it would require such an interval before a deposit would take place in the spleen. I gave a similar opinion, and the pathological reason that I assigned was the uniform distribution of the inflammatory patches throughout the intestinal canal. On this point see Dr. Harley's note.[2] Messrs. Lowndes and Davies declined to give an opinion on this point with regard to any of the cases. I shall only make a few remarks regarding the exhumed bodies. The absence of any appearance indicating kidney congestion, or of any marked inflammation of duodenum, contrasts strangely with the condition of these organs in the case of Thomas Higgins, and resembles the "Atlee family" case. The nature of this yellow pigment is a matter of much interest to the profession; and Dr. Campbell Brown and Mr. Davies deserve our warmest thanks for the trouble they have taken. It appears strange that biliary pigment should be absent from the portion of bowel nearest to the liver. Possibly the pigmentary matter is a product of the intestinal juices and the hepatic secretion, and, as we know the glandular structures vary in the different parts of the tube, we may thus account for the pigmentary distribution in the two bodies.

Liverpool.

ON THE

YELLOW PIGMENT FOUND IN THE INTESTINES IN CASES OF ARSENICAL POISONING.

BY J. CAMPBELL BROWN, D.Sc.,
AND
EDWARD DAVIES, F.C.S.

IT has frequently been recorded that after long interment a yellow colour has been observed in the stomach and intestines of persons who have died from arsenical poisoning. It is not always stated to what this yellow colour is due; but it has sometimes been attributed to the formation of sulphide of arsenic. Thus, in "Taylor on Poisons," the following passages occur:—"White arsenic slowly becomes changed to yellow sulphide by the evolution of sulphuretted hydrogen in the decomposition of the stomach or of its contents. It then forms a deep yellow stain through the coats and appears on the external surface. In Mrs. Smith's case the sulphuret of arsenic was discovered in the stomach fourteen months after interment. In the case of the Cheshams, the coats of the stomach were in both instances deeply dyed, with large patches of yellow sulphide, nineteen months after interment. In some cases the coats of the stomach and intestines, the liver, diaphragm, and even the bones of the spinal column, may be thus deeply stained of a yellow colour."

In "Reports of Trials for Murder by Poisoning," by Lathom Browne and Stewart, the following passage occurs:—"In bodies long buried the arsenic is often converted into sulphide by putrefaction, and then appears as a yellow coating."

No proof has ever been adduced, so far as we are aware, that the yellow substance is really sulphide of arsenic. We have recently had an opportunity of examining a yellow substance, found under similar circumstances to those referred to, in two bodies exhumed in January last, and think it desirable to place our observations on record. One of the bodies was that of a young man, aged twenty-two, which had lain in the grave upwards of three years. It was in a state of good preservation, the stomach, intestines, and viscera having decreased in size without losing their usual form and appearance. From the whole of the abdominal viscera, three grains and a quarter of arsenic were extracted. The whole of the small intestines were coated internally with a bright-yellow pigment, resembling mustard, as were also the greater part of the mesenteric vessels. The colon was visible through the walls of the intestines. It reminded one of orpiment, and in some places realgar. The other body was that of a girl aged ten years, which had been in the grave more than thirteen months. The viscera were in a good state of preservation, although contracted. From the abdominal viscera a grain of arsenic was extracted. The bright-yellow pigment was distinctly present in the intestines and mesentery, although the quantity was not so great as in the previous case. In another body, which had not been buried, no yellow pigment was found, although there was more than a grain of arsenic in the intestines. In a fourth body, which had been in the grave less than a year, but in which the quantity of arsenic was probably not more than half a grain, the yellow pigment was perceptible, but the quantity was very small. We collected a considerable quantity of the yellow pigment, weighing in the moist state between twenty and thirty grains. It was carefully tested for arsenic, and was found to contain no appreciable quantity of that drug. It certainly was not sulphide of arsenic. Nitric acid produced a play of indistinct colours similar to those produced by it in bile. We found that the yellow pigment was readily soluble in chloroform, forming a bright and clear yellow solution; less soluble in alcohol; slightly soluble in strong ammonia; precipitated by hydrochloric acid; and insoluble in water. The chloroform solution left on evaporation a deep yellow residue. This yellow residue was reddened by strong hydrochloric acid, while nascent hydrogen from zinc and hydrochloric acid discharged the colour and dissolved the residue. Nitric acid converted it into a purple, then red, then brown substance. Sulphuric acid gave a temporary violet colour, quickly becoming brown. Sulphuric acid and pure sugar gave the violet-purple tint characteristic of Pettenkofer's test. The colouring matter therefore appears to resemble one of the products of decomposition of bile pigment.

These results do not prove that it is actually formed from the bile, but that it is composed of one or more organic substances, one of which is somewhat similar to one of the pigments said to be formed by reducing agents on an alkaline solution of bile.

[1] THE LANCET, March 29th, 1862, p. 325. [2] Ibid., Nov. 23rd, 1861, p. 499.

KING'S COLLEGE HOSPITAL.—From the forty-fifth annual report which was read at the annual court of this hospital on the 28th ult., it appears that during the year 2094 in-patients had been admitted and 21,408 persons had been treated in the out-patient department, besides 6183 casualties which were attended to in the surgery of the hospital. The expenditure amounted to £15,448 11*s.* 2*d.*, and the total income to £12,609 2*s.* 4*d.*, leaving a deficit of £2859 to be paid out of capital. The legacies, which for the ten years ending 31st December, 1880, averaged nearly £6000 a year, amounted during the past year to only £1377.

REMARKS ON THE

ANTISEPTIC TREATMENT OF THE WOUNDED ON THE BATTLE-FIELD.

BY EDGAR M. CROOKSHANK, M.R.C.S.,
LATE CIVIL SURGEON, EXPEDITIONARY FIELD FORCE IN EGYPT.

THE iodoform and boracic dressing, mentioned in a paper read by me at the Medical Society of King's College, Dec. 7th, 1882, was again recommended at the discussion at the Woolwich Medical Society. It occurred to me at the time as the most effectual, and as presenting facilities in the way of transport. Sprays, of course, are out of the question, and all that is required as a first dressing is an antiseptic covering to the wound. It seems to me that in carrying out this principle every soldier could be provided with the means of being his own antiseptic dresser. For this purpose I would recommend that in the active service kit the soldier should be provided with an inside breast pocket rendered waterproof by a lining of mackintosh or some similar material; this pocket should contain a fold of antiseptic lint or a pad of compressed antiseptic wool, with a few yards of gauze bandage, and a miniature canister containing iodoform. I especially recommend the carbolised gauze bandage, because of the small space a few yards would occupy, and on account of the property it possesses, in bandaging, of moulding itself to the limb, and thus securely, but not too tightly, fixing the dressing. In Egypt I had to extemporise iodoform dusters or dredgers by perforating the ends of cylindrical strapping tins, but miniature tin canisters with perforated tops and covers could be easily provided. The waterproof pocket would ensure the dressing being *clean* and *dry*, unless, as is not unlikely, it were used as a convenient tobacco pouch, and in that case it would be better to supply every soldier with a light inexpensive tin case about the size of a cigar case, which could be carried in a breast pocket or attached to some part of his kit. This case could contain either a minute canister of iodoform, or a tube on the principle of artists' colour tubes, containing an antiseptic cream made from iodoform and eucalyptus oil, a gauze bandage, and, if economy must be attended to, a packet of compressed carbolised tow and a strip of protective, in lieu of iodoform, or some more expensive antiseptic. Meddlesome surgery no doubt is dangerous in the extreme, and in severe cases a little knowledge may do more harm than none at all; yet for all that, in simple cases, I see no reason why every soldier not incapacitated by the character of the wound should not help himself just as in civil hospitals, where we send away outpatients with a small supply of iodoform and lint, &c., to dress their ulcers, soft chancres, &c. It is quite evident that we must use a dry dressing; we cannot recommend lotions to be used on the battle-field. The limb must be cleansed and lotions applied, if necessary, at the field hospitals. Sir Joseph Lister's corrosive sublimate lotion would be doubtless very useful in the field hospitals, but where compactness and simplicity are essential requisites we must steer clear of recommending too many antiseptics, and I think the chloride of zinc would be found more valuable; as a hæmostatic and antiseptic a forty-grain solution for swabbing flaps after amputation and cleansing suppurating channels has long been in use at King's College Hospital. Hand sprays were in use in the Egyptian War at the Ismailia Hospital, and the drainage-tubes supplied there were mostly of the thickness of a pipe-stem. In future, if sprays are used at all, steam sprays must be supplied, as the others cannot be depended upon, and the former are of great use for disinfecting medical wards. The red drainage-tubes should be supplied of all sizes, varying in calibre from a pipe-stem to the thickness of the forefinger; and, as mentioned in the report referred to above, the sulphurous catgut is far preferable to the carbolic.

In conclusion, the principle of "*every wounded soldier his own antiseptic dresser*" deserves consideration. In wars to come the wounded will not, if we have repetitions of Plevna and Sedan, be counted by hundreds, but by thousands. In that case, however efficient an army medical department may be, there will be always more than enough for the surgeons of the first line to do in attending to the severest cases; and if the surgeons should fall as well as the combatants themselves, or regiments be isolated from the field hospitals, or an engagement take place over such an extent of country that in thickets and woods batches of wounded are missed, then means being at hand for the wounded soldier to apply an antiseptic dressing for himself or with the aid of a wounded comrade cannot but tend to benefit the condition of that most deserving sufferer, the man who is injured in defending the interests of his country.

IDIOPATHIC TETANUS.

BY EDWARD CURETON, M.R.C.P. EDIN. (EXAM.),
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THE following interesting case of idiopathic tetanus should, I think, be recorded.

T. D——, aged seventy-eight, by occupation a labourer in a country district, had always enjoyed good health, with the exception of the last three years, during which time he had occasionally had attacks of articular rheumatism, but never of sufficient severity to compel him to keep his bed. He had never met with any serious personal injury. The cottage he lives in is a small two-storeyed one on the side of a hill. For some time past the roof has needed repair, letting in wet, which has made the floor and bedding of the room occupied by T. D—— damp. On Dec. 25th, 1883, he felt chilly, and an ordinary nasal catarrh developed; a few days later he complained of pain in the medium-sized joints of the extremities, but there was no marked swelling, which he ascribed to rheumatism. On Jan. 8th, 1884, the patient complained of stiffness in the back of the neck, which was followed next day by tightness and stiffness in the muscles of the lower jaw, attended by difficulty in swallowing. He also complained of severe pain in the region of the epigastrium, shooting through to the back and affecting his breathing, the pain being of a paroxysmal character. The jaw continued to get more rigid every day, and was accompanied by spasms affecting the muscles of the neck, pulling the head strongly backwards, the jaws becoming closely and firmly set, and, owing to the age of the patient, there being an absence of side grinders, the lower jaw overlapped the upper one to such an extent when seen on the fifth day of illness as to push upwards the upper lip and embarrass the breathing through the nose, the patient being obliged to hold the lower lip down with the fingers in order to get his breath or to articulate. At this time the muscles of the trunk and spine were becoming involved, so that at intervals the whole body was drawn forcibly backwards. When the patient felt a paroxysm coming on he motioned to his wife to help him out of bed to the floor, and, as his wife stated, his body was drawn forcibly backwards, so that she thought he would fall without assistance. These paroxysms increased in severity and frequency until the patient was no longer able to rise from his bed. Urgent dyspnœa came on, with all the appearance of suffocation about to supervene, and on the morning of the sixth day the patient expired in one of the violent contractions which ensued, the mind in the intervals appearing clear to the last. The treatment consisted in the administration of large doses of bromide of potassium; a vapour bath was also improvised, but no treatment seemed to have any good effect.

Remarks.—It has appeared well to place the history of this case on record because it was an undoubted one of idiopathic tetanus, no injury of any kind having been received, the only apparent cause being cold and damp in a rheumatic subject. Being, like chorea, a derangement of the motor functions of the spinal cord, the cord as high as the fifth nerve, and not the brain, appearing to be the chief seat of the affection, the symptoms of this disease would be ascribable to a morbid excitement of the motor nerves produced by a poison acting on them, and probably the poison was that of rheumatism. Niemeyer, in his work on medicine, classifies rheumatic tetanus as a distinct and recognised affection. There can be no doubt about the extreme rarity of this affection, Dr. Aitken, in his standard work on medicine stating that idiopathic tetanus "is believed to be extremely rare in this country." Another interesting feature in the case is the age of the patient.

Shrewsbury.

ENUCLEATION OF A UTERINE FIBROMA BETWEEN THE SECOND AND THIRD STAGES OF LABOUR.

BY J. FARRANT FRY, L.R.C.P. LOND.,
ASSISTANT-SURGEON TO THE SWANSEA HOSPITAL.

MRS. E——, aged twenty-nine, a strongly built woman, was married at twenty, and had been pregnant eight times with the following result:—1. A seven-and-a-half months' stillborn child. 2 and 3. A miscarriage at the sixth week. 4. A seven-and-a-half months' stillborn child. 5. A full-time female living child, after twenty-four hours' natural labour (this was in 1875). 6. A full-time female living child after thirty-six hours' labour (delivered by forceps). 7. A third full-time female living child after sixty hours' labour (delivered by forceps; this was in 1879). A few days after this confinement a hard swelling the size of a cocoanut came down whilst she was sitting on the chamber. She caught hold of it with her hands and tried to drag it away, but her doctor, coming in sent her back to bed, and took no notice of what she told him had occurred. 8. In November, 1880, she was attended by two doctors, who found a large tumour attached to the anterior lip of the cervix, and who, with considerable difficulty, delivered, by turning, a full-time stillborn female child. A few months after this the patient was placed under chloroform and a portion of the tumour removed with the wire écraseur, but, being sessile, it was impossible to take it all away. Prior to this her periods had always been regular and natural, but since the operation she had constant hæmorrhage. On May 16th, 1882, she first came under my care, though I had been present and had examined her at the operation. She was pregnant, and almost at full term. On vaginal examination I found a large smooth tumour attached by a broad base to the inside of the anterior lip of the cervix. It was of the size of a small fœtal head, and almost filled the pelvic inlet; the posterior lip was stretched like a valve over the centre of the tumour, and no membranes or presentation could be felt; indeed the hand had to be passed into the vagina to reach the interval between the tumour and the posterior lip. With difficulty a gum-elastic catheter was passed into the uterus at 5 P.M. on May 16th. Increasingly strong pains followed, and in twenty-four hours, by passing the hand into the vagina, the os could be easily dilated and two fingers (slipped up between the tumour and the sacral promontory) felt the right foot, which was brought down and the membranes ruptured. The case was then left to nature for four hours, and at 10 P.M. Dr. Ebenezer Davies kindly gave chloroform, and I was able to lift the tumour slightly forward and to bring down the left foot and fairly easily to deliver a nearly full-term living female child. On again passing my hand into the uterus, I felt certain the tumour could be peeled from the uterine wall, as its connexion with it felt like that of an adherent placenta; so, as the placenta was detached, I kept this in utero with the object of preventing as much as possible uterine contraction, and carefully peeled off the tumour from the anterior lip and adjoining wall of the uterus, to which it was attached for a surface of about three inches in diameter. This was easily effected, except near the margin of the os, where a firm fibrous band had to be cut through after being ligatured. The placenta immediately followed, and the amount of blood lost was not more than usual, and both mother and child did well. On July 24th, 1882, the sound passed the normal length and no evidence of the tumour existed. She did not suckle the child, and menstruation had recurred naturally. In April, 1883, as the result of a fall, she miscarried at the sixth month, giving birth to a male stillborn twin without any assistance, and nothing could then be felt of the pre-existing tumour.

Remarks.—I have thought this case worth reporting, since I believe the treatment adopted is universally condemned. When I consider, however, the frequent pregnancies which occurred with gradually increasing difficulty in effecting delivery, the very careful but ineffectual attempt which I had seen made to remove the tumour with the écraseur, the perfect ease with which I was able to take away the tumour under the altered circumstances, and the entire absence of a subsequent bad symptom, I cannot but think that the end attained justified the practice, and that it was right to seize such a favourable opportunity for extirpating the growth.

TUBERCULAR MENINGITIS.

APHASIA; PARALYSIS OF ARM, LEG, FACE, AND TONGUE; CONVULSIONS; DEATH.

BY MICHAEL COLLINS, M.D., M.CH., Q.U.I.,
LATELY SENIOR RESIDENT SURGEON, NOTTINGHAM GENERAL DISPENSARY.

J. H——, aged eight, said to be unwell, off and on, since March, was taken suddenly ill at the commencement of June of last year. His mother noticed that for some time past he suffered from general malaise and slight loss of flesh, but she did not consult any medical man till the child had "a fit" on June 5th. I saw him soon afterwards, but found no distinctive evidence of serious brain mischief, and merely prescribed a vermifuge powder. Next day he passed a round worm, and soon recovered his usual elasticity of frame and buoyancy of spirits. On June 25th I was asked to see him again, and found him suffering from symptoms referable to tubercular meningitis of the base of the brain—headache, sickness, retracted abdomen, constipation, with a pulse of 120 and a temperature of 101° F.; tache cérébrale fairly well marked, cold feet and hands and cold sensation; pupils dilated and acting fairly to light; no ptosis and no paralysis of recti. The cephalalgia was at times intense. His hair was cut off and ice applied, rest and quietness were enjoined; he was ordered light and nutritious food, but no medicine beyond a gentle aperient. Then followed several days of delusive calm. The mother's hopes were buoyed up, but unfortunately they were destined to be rudely shaken on the 31st, when our little patient had a convulsive seizure which left him suffering from aphasia, paralysis of the right arm, right leg, and right side of the face and tongue. The paralysis was well marked in the right arm, face, and tongue; the paresis of the leg was comparatively slight, and soon recovered from. Pulse 130, strong; temperature 101·6°. On August 2nd the pulse was 90, temperature 101°. The next few days brought slight improvement, till about the 6th, when pain in the right side with urgent dyspnœa supervened. Physical examination of the chest revealed diminution of normal respiratory sounds at both bases, tubular breathing with well-marked dulness at left apex. The urgent chest symptoms soon disappeared; the dulness remained. By August 10th gradual improvement again set in. Slept well with the exception of occasional startings. He now began to move his right leg well and his arm slightly. But the facial and lingual paralyses were as well marked as ever. He could say "No" and "Yes." He took nourishment liberally. The cephalalgia was still intense. On August 13th the pulse was 100, irregular and intermittent. The patient vomited in the afternoon; headache was severe. On the next day the irregularity and intermittency of the pulse had disappeared, and I was unable to detect it again during my subsequent visits. Now set in a final delusive calm, the halo hovering round decay. For a little time he could walk across the room and place his right hand on any part of his head; there was intermission of severe head symptoms; speech did not return. He sat up during the day, slept well, and took his food with manifest relish. On Sept. 15th convulsions set in, lasting for half an hour, and leaving him in an unconscious condition till the following morning. On the 16th the patient was drowsy but conscious, pupils dilated and almost insensitive. On the 17th convulsions supervened, and death closed the scene.

Unfortunately a post-mortem could not be obtained. It scarcely admits of a doubt that the meninges at the base of the brain were studded with miliary tubercle at first; that these subsequently invaded the cortical motor zone of the left hemisphere, producing hyperæmia and disorganisation, well marked in the lower part of the ascending convolutions and posterior part of the inferior frontal convolutions. The upper part of the ascending convolutions one would expect to find affected in a less degree. The cases reported by Mr. Seymour Sharkey bear out my diagnosis.

A NUMBER of vendors of milk in Birmingham have recently been fined for adulteration with water and abstraction of cream. Although stated to have been sold as received in several instances, the law was brought to bear upon the consignees in the absence of a written guarantee with each lot sent, the railway companies refusing to carry it under lock and key.

CASE OF ŒSOPHAGOTOMY.

BY EDWARD LAWRIE,
PROFESSOR OF SURGERY IN THE LAHORE MEDICAL SCHOOL.

A SIKH female, aged thirty-five, was admitted into Mayo Hospital on Dec. 14th, 1883, with a large gall-nut impacted in the gullet. She had been suffering previously from an affection of the eye, and was told by a friend that if she held a gall-nut in her mouth for two hours she would be cured. While giving this plan of treatment a trial the nut slipped down her throat and lodged in the cervical portion of the œsophagus. During the twenty-four hours following her admission every attempt to dislodge it failed. On the 15th the patient was very low and distressed, and it was decided after consultation with my colleagues to perform œsophagotomy. The operation was carried out in the usual way by dissection through the loose cellular tissue between the carotid vessels and the trachea till the foreign body was felt through the walls of the œsophagus, which was opened by a longitudinal incision and the nut removed. The woman was fed through a tube for five days, swallowing was perfectly restored in twelve days, and she was discharged cured in three weeks.

Lahore.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem estalia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF DIFFUSED POPLITEAL ANEURISM, TREATED FIRST BY COMPRESSION, AND SUBSEQUENTLY BY LIGATURE OF THE SUPERFICIAL FEMORAL ARTERY IN SCARPA'S TRIANGLE.

(Under the care of Mr. MORRANT BAKER.)

FOR the notes of the following case we are indebted to Mr. H. B. Tait, house-surgeon.

The patient, aged thirty-five, a well-nourished man of medium height, was admitted on Sept. 10th, 1883. He was originally a groom and coachman, his work consisting chiefly of driving, but for the last three years he had followed the trade of a hawker. There was an indefinite history of syphilis fifteen years ago, and a history of small-pox seven years ago, but of no other illness. The patient had at the time of admission an indurated chancre on the penis, with shotty glands in the groin; he had neither rash nor sore-throat. On Sept. 2nd he first noticed a swelling about the size of a hen's egg in the right popliteal space, but did not come to the hospital until the 7th, and even then refused treatment until the 10th, when he was admitted to Harley ward. He said that on Sept. 7th and 8th he walked a great deal, and afterwards suffered considerable pain in the limb. On Sept. 9th the pain increased so that he remained in bed.

On admission, the right popliteal region was found to be occupied by a large pulsating tumour, which had a distinct bruit. The pulsation was easily controlled by pressure on the femoral artery in the groin; the leg and thigh were also considerably swollen. The measurements were as follows:—Right leg: middle of thigh, nineteen inches and a half; round knee, sixteen inches and a half; round calf, sixteen inches. Left leg: middle of thigh, eighteen inches and a half; round knee, thirteen inches and a half; round calf, thirteen inches.

On Sept. 11th the patient was fairly comfortable. One-sixth of a grain of morphia was administered hypodermically the night before. The pulsation seemed slightly less. On Sept. 12th the pulsation was more marked. The measurements round the thigh and knee had increased half an inch respectively. The patient had suffered a good deal of pain during the early part of the night, but was comfortable after a hypodermic injection of one-sixth of a grain of morphia.

It being decided to try compression for twenty-four hours, a small pad was placed on the artery in the groin, and a shot-bag weighing 14 lb. was used as a weight. Pressure was commenced about 3 P.M. At 5 P.M. it was noticed that the swelling of the limb had increased, and that the integument over the tumour and upper part of the leg was discoloured. At 6 P.M. digital pressure was substituted for that of the pad, the shot-bag being used as before. At 7 P.M. the measurement round the knee had increased an inch and a quarter, that round the calf having also increased seven-eighths of an inch. At 7.45 P.M. all pressure was discontinued. It being, however, found that the limb became still more swollen, and that the discolouration was increasing, digital pressure without the weight was again applied, until Mr. Baker's arrival, when all pressure was again discontinued. At 10.30 the patient was taken to the theatre, and Mr. Baker tied the superficial femoral artery in Scarpa's triangle, the leg being first wrapped in cotton-wool, and bandaged with flannel. The artery was tied in two places with kangaroo tendon, and divided between the ligatures. Catgut sutures and sanitas oil dressing were used, a strip of gutta-percha tissue being employed for drainage.

On Sept. 13th the leg and thigh were much less tense. There was no pulsation in the aneurism; the foot was quite warm and sensation good; there was hardly any discharge from the wound. The patient complained of very little pain. Evening temperature normal, morning 99·2°; pulse 76, regular. He took iced milk well. One-third of a grain of morphia was injected hypodermically at night. On the 14th the wound was looking well; two stitches were removed. The patient was comfortable, and had a good night without morphia. On the 15th the bowels were open three times after castor oil. The patient was free from pain, his temperature being normal. On the 17th the wound was looking very well; all sutures and drainage were removed.

On Oct. 1st there was some hardness, and very slight discolouration in the popliteal region. On the 8th the patient got up for the first time. On the 13th there was still some hardness, and slight discolouration in the popliteal region. The measurements were as follows:—Right leg: round thigh, nineteen inches; round knee, fourteen inches and a half; round calf, twelve inches and a half. Left leg: round thigh, eighteen inches and three-quarters; round knee, fourteen inches; round calf, thirteen inches.

The patient left the hospital on Oct. 15th, and when seen again some weeks afterwards was quite well.

Remarks.—It was not considered very probable in this case that pressure would cure the patient's aneurism. But he was much frightened at the idea of any operation, and it seemed likely at the time that he would leave the hospital if its consideration were pressed upon him. Pressure was therefore tentatively employed, but the leaking of blood from the aneurism, which had probably begun before the patient's admission into the hospital, was not restrained, and it became imperatively necessary to tie the artery without delay. Mr. Baker remarked, "That each case must be treated on its own merits; extravasation of blood beyond the immediate limits of the aneurism might seem at first sight to contra-indicate altogether the employment of pressure; but in the fifteenth volume of the St. Bartholomew's Hospital Reports a case was recorded in which extravasation had gradually occurred to such an extent as to obscure the diagnosis by almost stopping the pulsation, and in which, notwithstanding, the aneurism was easily and quickly cured by digital pressure with the help of Esmarch's bandage." In the present case Esmarch's bandage was clearly inapplicable, and digital pressure was applied for a few hours only, and with much caution. This case is the second within the past year in which Mr. Baker has tied the femoral artery by kangaroo tendon ligatures, dividing the artery between them.

LIVERPOOL NORTHERN HOSPITAL.

CASE OF LARGE SALIVARY CALCULUS; EXCISION OF SUBMAXILLARY GLAND.

(Under the care of Mr. CHAUNCY PUZEY.)

THE following case seems to be noteworthy, not merely on account of the unusual size of the calculus, but because of other circumstances which will appear in the record.

The patient, a woman aged about thirty-five, was under Mr. Puzey's care in the Northern Hospital two years before on account of a mass of tuberculous glands, the size of a man's fist in the left axilla. Excision was performed, the

axilla being completely cleared out. The wound healed well, and she has had no trouble since in that neighbourhood. At that time she had a swelling, apparently glandular, in the left submaxillary region, but as it was not causing her any trouble, nothing was done for it, although she remained in hospital for several months on account of a much more serious matter, which was discovered a few days after the first operation—namely, fistulæ and extensive stricture of the rectum. Whether this stricture was the result of tuberculous or of syphilitic ulceration was not clear; but she had at the time numerous patches of syphilides; and under the prolonged influence of the biniodide of mercury and tonics, with the local use of the bougie and mercurial ointment, this trouble was set right, and at the present time the rectum is soundly healed, though much contracted by cicatricial tissue.

Early in November of last year she again presented herself at the hospital, complaining of the swelling in the submaxillary region. She said that three or four months before it had increased considerably; then an abscess formed, which was opened, discharged freely, and then healed; but the swelling remained larger than before, and caused pain in swallowing. The tumour was now found to be considerably larger than when she was last in hospital, and much more fixed. It pretty well filled the submaxillary space. Examined through the mouth it was felt to be very hard, but not adherent to the mucous membrane. Bearing in mind the previous history of the case, no suspicion was entertained that the swelling was anything but a lymphatic glandular tumour of the same nature as that previously removed from the axilla. The removal of it, however, was not found as easy as had been expected; the skin certainly was not adherent, but all the other structures were so, and had to be separated by dissection; and it was not until the removal was all but completed that the true nature of the swelling was discovered. It was then found that the tumour was composed of the submaxillary gland, and its dilated and hypertrophied duct, tightly stretched over a salivary calculus; there were a few adherent lymphatic glands, but the main part of the tumour was as just described. A portion of the facial artery was necessarily removed with it. The wound healed by granulation, and the patient made a good recovery.

The calculus, which was of very light specific gravity, was of a pale-buff colour, and somewhat resembled in shape a cat's paw, being subdivided or digitated at its broad end. It measured one inch and a half in length, one inch in breadth at its widest part, and half an inch in thickness; its weight was 115 grains. Considering its size, the weight appears very little, as usually is the case with these concretions, composed as they are for the most part of the phosphates of lime, soda, and magnesia.

SOUTH STAFFORDSHIRE AND WOLVERHAMPTON GENERAL HOSPITAL.

FRACTURED STERNUM.

(Under the care of Mr. VINCENT JACKSON.)

FOR the following notes we are indebted to Mr. J. W. Batterham, M.B., B.S. Lond., house-surgeon.

John C——, aged forty-three, miner, was admitted on Sept. 13th, 1883. The patient stated that while working in the pit he was struck across the shoulders and the back of the head by a falling mass of coal, which, to use his own words, quite "doubled him up," the head being forcibly flexed on the chest.

On admission he was found to have sustained a simple fracture of the seventh left rib near the anterior axillary border, and a simple transverse fracture of the sternum. This fracture was situated on a level with the upper border of the fourth costal cartilage. The upper portion of the fractured bone was depressed below the level of the lower to the extent of half an inch. No attempt was made to elicit crepitus or to raise the depressed bone.

The patient was treated for his fractured rib by strapping and rest in bed for a few days. No untoward symptoms appeared, and the patient was discharged quite well on Oct. 3rd, with a slight deposit of callus round the sternal fracture.

RUPTURED STOMACH; DEATH; NECROPSY.

(Under the care of Mr. VINCENT JACKSON.)

R. A——, aged seventeen years, edge-tool grinder, was admitted on Sept. 25th, 1883. Half an hour before admission the patient was at work "polishing" at an emery wheel three feet in diameter and five inches thick, when the wheel flew into pieces, a large fragment striking him on the abdomen.

On admission, at 10.30 A.M., the patient was conscious, but greatly collapsed; skin pallid and covered with cold sweat; pulse 80, small, weak, regular. Pupils equal, contracted. There were slight wounds of face and legs, and a hæmatoma of the scrotum. The abdomen was universally tender, most so at the epigastric region. There was no dulness in the flanks. About three-quarters of an ounce of urine were drawn off, slightly tinged with blood, a catheter tied in, and a grain of opium pill given. At noon it was noted that the patient had for the last hour been vomiting coffee-coloured matter mixed with streaks of bright-red blood. At 1 P.M. a quarter of a grain of morphia was injected hypodermically. During the afternoon he got gradually weaker, and the vomiting ceased. At 5 P.M. the pulse was imperceptible at the wrist; abdomen somewhat distended. Some dulness in the right flank. The patient died at 6.30 P.M.

Necropsy, forty-seven hours after death.—On opening the abdomen two or three pints of reddish fluid escaped from the peritoneal cavity. There was a ramiform injection of the peritoneum covering the bowels. Blood clots were found between the layers of the great omentum and other peritoneal folds connected with the stomach—gastro splenic, gastro-hepatic. Blood clots extended along the course of the duodenum, in front of the aorta and vena dura, and between the layers of the mesentery. The anterior surface of the stomach presented, near the pylorus, an incomplete rupture about an inch long; the peritoneal and mucous coats were here ruptured, the muscular coats remaining intact. On the posterior surface of the stomach was a rent two inches and a half long, commencing within an inch of the pylorus and running towards the left parallel with the lesser curvature. A small rupture of the peritoneum was present between the last-mentioned rent and the lesser curvature; no food was found in the peritoneal cavity. The right kidney presented slight ecchymosis of its capsule. Left kidney normal. Bladder empty, normal. Other abdominal and thoracic viscera healthy, liver and spleen being, however, extremely pallid.

Remarks by Mr. BATTERHAM.—I have been able to collect from reports of Societies &c. eight other cases of complete rupture of the coats of the stomach. In two cases the rupture was the result of excessive vomiting; excepting some softening of the mucous membrane, the stomachs were healthy. In both instances the rupture was situated at the cardiac extremity, near the œsophageal opening. In the other six cases, where the rupture resulted from the effects of external violence acting on healthy viscera, the rent was situated in three cases at the pyloric extremity, in two on the greater curvature, and in one at the cardiac extremity. In the case I have just reported the extreme thirst which has sometimes been noticed was absent. It is stated in Holmes's Surgery that no vomiting occurs, unless the rupture is small or incomplete. In one of the three cases of rupture near the pylorus above alluded to death was instantaneous. In the other two vomiting occurred, although the rupture was neither small nor incomplete. In the case recorded by Mr. Erichsen the stomach was torn almost completely across; and in another which was treated at Addenbrooke's Hospital in 1880, the patient, I am told, vomited blood, though an aperture as large as a crown piece was found after death near the pyloric end of the stomach.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

THE annual meeting was held on Saturday, March 1st, at 8 P.M., Mr. John Marshall, F.R.S., President, in the chair.

The PRESIDENT, in taking the chair, declared the ballot open, and nominated Mr. Christopher Heath and Dr. Bernard O'Connor as scrutineers.

The reports of the auditors and of the president and Council were read by the secretary, Dr. DOUGLAS POWELL, and contained the usual statements as to the condition, financially and numerically, of the Society. The Society was congratulated on the continued prosperity of its affairs and on the increase in the number of its Fellows, which, including honorary, resident, and non-resident Fellows, now

amounts to 720. During 1883 eighteen Fellows had died and three had resigned, while thirty-five new Fellows have been elected. The expenditure had been increased by the augmentation of the resident librarian and other salaries and by the greater outlay on the proceedings, which now include full reports of the speeches at the Society's meetings. The library was in a flourishing state. The Council expressed its deep sense of the loss to the Society of the late resident librarian, Mr. B. R. Wheatley, whose sudden death had deprived them of a devoted and most efficient officer of unequalled skill in his profession. The report of the Council announced that, from ninety-three candidates for the vacant office, Mr. James B. Bailey, member of the Association of Librarians, and for sixteen years sub-librarian of the Radcliffe Library of Oxford, had been appointed to the office of resident librarian.

Mr. JOHN WOOD proposed the adoption of the report of the Council; this was seconded by Dr. DAY and carried.

The PRESIDENT then addressed the meeting. An obituary notice of the deceased Fellows occupied the first half of the address. The names of the deceased Fellows, of whom the President gave many interesting notices and details, were: Dr. R. S. Hudson, Mr. G. H. Evans, Dr. F. H. Wilson, Dr. Marion Sims, Mr. John McNaught, Dr. J. M. Gully, Mr. J. Harding, Dr. Giacometti Meredith, Dr. Hilton Fagge, Mr. Robert Drewitt, Mr. Richard Phillips, Dr. Alexander Patrick Stewart, Dr. T. W. Jones, and Dr. William Farr. The President next read many interesting facts concerning the origin and activities of the various other Medical Societies of the metropolis and provinces. The signs of contemporaneous increase of professional activity were manifested in the augmentation of the number of such associations, in the formation of new societies, and in the remarkable growth of medical literature. Of all this activity the Royal Medical and Chirurgical Society had taken its proper share. The question of amalgamation of the different Societies was next touched upon. Dublin had lately afforded an example of this method of centralisation. But there were many differences between Dublin and London; and the question for the latter was yet an open one. The President concluded by thanking the Society for the honour which had been done him by his election to the presidency, and hoped that the Society would continue to exercise its *rôle* as one of the chief centres for the extension of scientific learning.

In a few well-chosen words Mr. SCOVELL SAVORY proposed a vote of thanks to the retiring President; this was duly seconded and carried with enthusiastic acclamation.

Dr. PRIESTLEY then proposed, and Mr. ROBERT W. PARKER seconded, a vote of thanks to the retiring Vice-President, Dr. Russell Reynolds; this was also carried.

Dr. WILSON FOX next moved, in very feeling terms, a resolution to the effect that a subscription be started, as a memorial to the late Mr. Wheatley, for the purpose of purchasing suitable annuities for the sister and niece of the late lamented resident librarian. This was seconded by Mr. SCOVELL SAVORY, and carried. A committee composed of the following gentlemen, with power to add to its numbers, was elected:—Mr. John Marshall, Dr. George Johnson, Mr. Scovell Savory, Mr. Berkeley Hill, Dr. Radcliffe, Mr. Cooper Forster, and Dr. Wilson Fox.

In the course of the evening the ballot went round for an alteration in the bye-laws, which should accord to resident honorary Fellows the privilege of visiting and using the library in the same manner as ordinary resident Fellows.

PATHOLOGICAL SOCIETY OF LONDON.

Fracture of Cartilage of First Rib and of Sternum.—Neoplasm of Knee-joint.—Insular Sclerosis.—Interstitial Disease of the Ovary.—Epithelioma of External Ear.—Fibrotic Disease of the Heart.—Symmetrical Gangrene.

THE ordinary meeting of this Society was held on Tuesday last, Mr. J. Whitaker Hulke, F.R.S., President, in the chair. The number of card specimens shown was very remarkable.

Mr. ARBUTHNOT LANE read a paper on Fractures of the Sternum and First Costal Cartilage. Maisonneuve had attributed fracture of the sternum to force transmitted from the shoulder to the sternum by the clavicle, whereas Mr. Rivington had conten led that the action of the clavicle was in no way essential to fracture of the sternum and regarded the first two ribs and cartilages as the means by which were transmitted to the sternum one of the forces which fractured or dislocated it, the other being conveyed along the lower ribs. He showed that, as the inner end of the clavicle was fixed by ligaments, if vertical pressure were applied to its outer extremity, a much greater force was exerted on the anterior extremity of the first rib by the shaft of the clavicle in contact. Mr. Lane next stated that the first cartilage was one inch and a half deep at its attachment to the manubrium, while the second cartilage was only five-eighths of an inch, so that when one cartilage was depressed by the clavicle it tended to cause the manubrium to rotate round an antero-posterior axis, and also affected the opposite cartilage. If the pressure exerted were very great, one or both first costal cartilages might be broken, together with the sternum, without there being any displacement of fragments; or only one cartilage might be broken. If the cartilages were very elastic and the sternum rigid, it alone might yield, as in an experiment he had made on the dead body. In this case the manubrium was ossified to the gladiolus. A heavy blow was struck on the outer extremity of the clavicle (carefully padded, in order that it might not be fractured), a fracture of the sternum at a point which corresponded to the junction of the first and second pieces resulted, the fragments not having been displaced. In other cases, the ligaments binding down the inner extremity of the clavicle might give way, and dislocation upwards ensue. As exemplifying this last result he showed a specimen from the museum of Guy's Hospital, in which the inner end of the clavicle had been dislocated upwards, and the ossified first costal cartilage was fractured on the same side. Its line of fracture was irregular, and not vertical, as in fracture of the ordinary elastic cartilage. The sternum was not fractured. Mr. Lane showed a specimen similar to one which he had shown at the Society last year. The first cartilages and sternum had sustained the same fractures, no other bones in the body showing any sign of fracture. A case recorded by Dr. Bennett, *Dublin Quarterly Journal*, served also to illustrate his view. A heavy weight fell on a man, fracturing many bones. That which had fallen on the clavicles had fractured both first cartilages and the sternum at the junction of the first and second pieces. He believed that fracture of the sternum or cartilages, or of both, was not so very uncommon as the scanty literature on the subject would suggest; also that Maisonneuve had no clear idea of how the clavicle transmitted force to the sternum, which it did only indirectly by pressure on the first rib and cartilage. Maisonneuve apparently arrived at this conclusion by observing the frequent concomitance of fracture of the scapula and clavicle with that of the sternum. The sternum and cartilages, when fractured by this means, would present very little sign during life, nor at a period long after the injury, owing to the fractures remaining in apposition. It was very difficult to decide, in many ossified first cartilages, whether they had been fractured or not, as they frequently presented a very irregular outline, owing to abundant deposit of new bone, which might either be the result of fracture or thrown up to support the joint formed in this situation.—Mr. ROGER WILLIAMS spoke of the parts played by the rhomboid trapezoid and conoid ligaments in the distribution of force applied to the clavicle.—Mr. LOCKWOOD thought it was open to doubt whether there was a fracture of the sternum in one of Mr. Lane's cases. The heaping up of bone and cartilage, more especially between the first rib and its cartilage, was not of unfrequent occurrence, and he therefore doubted whether this condition was the result of fracture.—Mr. BRUCE CLARK looked on the heaping up of bone and cartilage as of a rheumatic nature, and agreed with the previous speaker.—Mr. HULKE had always regarded the most rigid part of the sternum as most liable to fracture.—Mr. LANE replied that he was perfectly familiar with the appearances spoken of by Messrs. Lockwood and Clark, but was sure that his specimen was of different origin.

Mr. BARWELL showed a Neoplasm of the Knee-joint. The case occurred in a young lady, aged twelve; when seen by him the knee-joint was greatly enlarged; on puncturing with a trocar some synovial fluid and arterial blood were drawn off. Later on he performed amputation through the lower third of the thigh. The patient did well for a time, but in the third week constitutional symptoms appeared which were probably of the nature of enteric fever. She suffered a relapse of this affection, and so had but slowly recovered from the operation. On bisecting the removed joint a soft jelly-like mass of a pale-yellowish colour was

seen to spring from the head of the tibia. Mr. Barwell said that he regarded all sarcomata as malignant. He then gave his views as to the nature and relationship of sarcoma and carcinoma. The malignant disease of youth was characterised by excessive activity of the connective tissue cells, and so we had types of growth which were called sarcomatous. He would use the term "cacoma" as generic for all tumours. Two years ago he had written on what he termed "acute traumatic malignancy," in which he advocated the view that under the stimulus of severe irritation, the tissue elements, which under favourable circumstances would assume only the additional activity necessary for repair, might take on a more prolific cell germination, culminating in a rapid form of malignant disease in some form or other (sarcoma-carcinoma).—Mr. BUTLIN said that the view advocated by Mr. Barwell had been also held by others—e.g., Mr. Hutchinson was in favour of regarding all tumours as cancers, and then subdividing them into connective tissue growths and epithelial growths.—Dr. CREIGHTON thought it was going too far to say that all sarcomata were infiltrating. The objection to the term "cacoma" was that it was cacophonous.—Mr. ROGER WILLIAMS said that the facial bones and femora were more frequently affected than the tibia.—Mr. GODLEE thought that all sarcomata did not merit the name of malignant.—Mr. HULKE remarked that confusion might be introduced into the subject by the use of clinical and anatomical characters in the classification of tumours.—Mr. BARWELL, in reply, maintained the views he had expressed in his paper.

Dr. HALE WHITE showed specimens taken from a case of Insular Sclerosis. For twelve months before admission to hospital the patient had had nervous tremblings, and subsequently to this weakness of the legs, which at last became so bad as to preclude walking. Latterly, her memory had been very deficient. She had always been a drunken, dissolute woman. On admission she was in such a moribund condition that a very thorough examination could not be made; but it was observed that there was tremor on movement, the right pupil was larger than the left, the grasp of the hands was feeble, and she spoke very slowly. She died shortly after admission. The necropsy was made twenty-six hours after death. In the left arachnoid cavity, and covering the greater part of the parietal lobe, was a hæmorrhage evidently recent; the arteries at the base of the brain were healthy. Scattered about in the white substance below the level of the corpus callosum were about four grey patches, looking very like grey convolutions, showing in the white substance. The medulla was obviously diseased, many reddish-grey patches being present in it. The rest of the brain was healthy. In the spinal cord many similar patches were scattered about in various parts, but chiefly in the crossed pyramidal tracts. In many places the whole of the white matter of the cord was affected. The kidneys were granular and hypertrophied. Microscopic examination of the cord and brain showed characteristic sclerotic appearances, carried in some places to such a degree that but little healthy nervous structure was present. In many sections it could be seen that the ingrowth of new tissue was directly connected with the rays of tissue prolonged in from the neuroglia on the surface of the cord; sometimes the axis cylinder had completely disappeared, leaving the medullary sheath, and sometimes the medullary sheath disappeared, the axis-cylinder having alone remained surrounded by sclerosed neuroglia. It was pointed out that the chief feature of interest in the case was that it was almost a purely spinal one. Not more than four cases in which a post-mortem examination had been made had been recorded in England, and only one of these was in the Pathological Society's Transactions.—Dr. HADDEN would not be inclined to look on the specimens as typical of insular sclerosis. He had seen as much change in cords from aged people who could not be said to be affected with the symptoms of insular sclerosis.—Dr. HALE WHITE replied that this criticism was perhaps just, but it was well known that the sclerotic change was more evident to the naked eye at the autopsy. His specimens were examples of the rarest form of insular sclerosis. Erb also described such changes.

Dr. NORMAN MOORE showed specimens of Interstitial Disease of both Ovaries. The ovaries, of which microscopic sections were shown, were from a married woman aged forty-one years, who died in St. Bartholomew's Hospital, under the care of Dr. Church, of cirrhosis of the liver. The liver, of which a section was also shown, exhibited great increase of fibrous tissue with extensive atrophy of the liver cells. The ovaries were large, extremely dense, and smooth on the surface. The microscopic sections showed great thickening of the tunica albuginea and of the perivascular connective tissue throughout the ovary. This change was especially distinct in the zona vasculosa. Numerous Graafian follicles, small and large, were visible; all had a more or less shrunken or compressed appearance. Dr. Matthews Duncan had suggested that interstitial change in the ovaries was a cause of sterility in intemperate women, and Mr. Lawson Tait had spoken of cirrhosis of the ovaries, but very little was to be found in authors as to the nature or frequency of the condition. In this case there was well-marked hepatic cirrhosis, and the ovaries were affected by a true interstitial change. It is less advanced than the interstitial change in the liver. Dr. Moore asked that the case might be referred to the Morbid Growths Committee for report.—Dr. GOODHART asked if there was any ascites. The cirrhosis might be secondary to œdematous swelling of the ovaries.—Dr. MOORE said there was ascites; it was interesting to observe that no interstitial disease of the kidneys existed.

Mr. BOWLBY read notes of a case of Epithelioma of the External Ear. The man, aged seventy, when first examined had a small growth on the helix of his right ear, which was attributed to a burn from some lime eighteen months previously. The tumour gradually grew and affected a larger part of the helix and the concha. It seemed to spread in separate portions of the pinna. It recurred after thorough removal, and was distinctly epitheliomatous, as the microscope showed. The way epithelioma spreads in cartilage was well seen in the microscopic specimens. Necrosis of the cartilage seemed to occur in small patches around the infiltrating tumour.—Mr. ROGER WILLIAMS spoke of the rarity of epithelioma of the external ear; it was chiefly a disease of the male sex; he had collected several cases from literature.—Mr. CLUTTON had seen a case of epithelioma which began on the auricle, and which was first thought to be rodent ulcer.—Mr. BUTLIN made mention of three cases which had come under his notice. In the first the disease recurred in the external auditory meatus, and the glands also were enlarged. The second instance also recurred after removal. The third case did not recur. He thought in this case the epithelioma really began within a sebaceous cyst, and had scarcely spread at the time of removal to the main structures of the pinna; hence the immunity which was enjoyed, for some years at least.

Dr. SAMUEL WEST showed a specimen of Fibrotic Disease of the Heart. The patient was a man aged forty, who had suffered from extreme pain of spasmodic character in the præcordial region. Death occurred suddenly. At the autopsy a little turbid fluid in the peritoneum, pericardium, and right pleura was discovered. There were ecchymoses in most of the mucous membranes. Some old scars were detected on the penis, probably of specific nature. All the cardiac cavities were enlarged, and many dense fibrous-looking patches were visible in the walls. One large area was of an irregularly oval shape, three inches long; this was the largest, and extended almost completely round the left ventricle. The wall of the heart was much reduced in thickness at this site, especially the outer wall of the left ventricle above and outside the papillary muscles. The fibrous tissue was dense and hard, and coated with laminated coagulum. The muscular tissue was slightly fatty. The right ventricle was slightly affected. The wide extent of the change was remarkable. Dr. Hilton Fagge had described two somewhat similar cases. Some thickenings existed in the capsule of the liver, which were probably of syphilitic origin.

Dr. BERNARD O'CONNOR read notes of a case of commencing Symmetrical Gangrene in the upper limbs of a woman, aged fifty-six. At the age of forty-one a small tumour had been removed from the right breast. About three months ago a similar tumour appeared in the left breast. Three weeks since a swelling was first noticed about the left upper costal cartilages, and at the same time numbness with violent shooting pains were felt in both upper limbs. Dark urine had been passed once. A superficial smarting and a burning deeper pain were described by the patient as felt in the upper limbs. Warm water afforded more relief than cold. The hair of the head came out in cold weather, and the pinna of the left ear was cold and bluish. Indurated glands were found above the left clavicle, and the inner end of the left clavicle was displaced outwards for fully an inch. With the second left rib cartilage as a centre, a globular swelling existed, over which no thrill was felt, but the cutaneous veins were enlarged, and there

was dulness. The patient had suffered from epigastric pain. Further examination showed that the axillary glands on the right side were enlarged. The heart's action was feeble, and there was a feeble pulse at the wrist. There was no fever, and neither the spleen nor the liver was enlarged. The specific gravity of the urine was low—1013. The blood showed many red corpuscles irregularly shrivelled and a slight excess of leucocytes. Either organic changes in the capillaries or else vaso-motor derangement was suggested as the cause of the commencing gangrene of the fingers. Obstructive arteritis was not uncommon in females, and affected the upper extremities.—Mr. BOWLBY said there was no evidence of arterial damage in this case, and suggested that the lesions were due to the spread of the new growths along the nerves which supplied the arms.

A large number of card specimens were exhibited:—Dr. Samuel West: Stomach from a case of Carbolic Acid Poisoning. Dr. Sharkey: (1) Œsophagus, Stomach, and Intestine, from a case of Carbolic Acid Poisoning; (2) Lodgment of Fish-bone in Larynx. Dr. F. C. Turner: (1) Tuberculosis of Lungs with Caseous Bronchial Glands and Tubercular Meningitis after Scarlatina; (2) Intussusception of the small Intestine with Polypoid Fatty Tumour. Mr. H. H. Clutton: (1) Nasal Calculus; (2) Central Myeloid Sarcoma of the Head of the Tibia, which produced no expansion of the bone. Mr. J. Hutchinson, Jun.: (1) An instance of Anchylosis of Second and Third Cervical Vertebræ; (2) A Heart with Superior Vena Cava on the left side. Dr. Goodhart showed for Dr. Pye-Smith a specimen of Chronic Ulceration and Thickening of the Tracheal Mucous Membrane from the presence of a rubber tracheotomy tube. Dr. R. Percy Smith: Stomach from a case of Sulphuric Acid Poisoning. Mr. Makins: A specimen of Obstruction of the Trachea in a child from pressure by bronchial glands. Mr. Golding Bird: Some Micrococci from a case of Infective Osteo-myelitis. Mr. Lockwood: A Right Aortic Arch. Mr. R. Williams: Two photographs of cases of Congenital Absence of the Femora.

MEDICAL SOCIETY OF LONDON.

Annual Meeting.—Cholera Epidemic.

THE annual general meeting of this Society was held on Monday last, Sir Joseph Fayrer, President in the chair. The annual report of the Society was read by Dr. Isambard Owen, the retiring honorary secretary. It showed that the condition of the Society was very satisfactory. Its accommodation had been greatly improved, and the number of its members had largely increased, and the interest as well as the attendance at the meeting had been more than maintained.

Dr. ALLCHIN, the honorary librarian, read a report on the condition of the library, which pointed out that in spite of the efforts made the work of cataloguing the library was still incomplete. The books, however, had been arranged on their shelves in such a manner that any volume required could be readily found. The library was rich in works of the 16th and 17th centuries, but poor in more modern works. This want would be gradually filled up as opportunity was afforded, and special efforts were being made to do this as speedily as possibly. The report was adopted, as well as a vote of thanks to Dr. Allchin.

Dr. BRODIE SEWELL proposed in graceful terms, and Dr. SYMES THOMPSON seconded, a vote of thanks to the retiring President, Sir Joseph Fayrer, which was accorded with enthusiasm. In reply Sir Joseph said that he had done his best to promote the interests of the Society during the term of his office. He thought this Society was related more intimately to the great body of the profession than any other Society of London.

Dr. DE HAVILLAND HALL proposed, and Mr. SYDNEY JONES seconded, a vote of thanks to the retiring vice-presidents, the retiring secretary, and other members of the Council.

Mr. H. WORDSWORTH, Dr. ISAMBARD OWEN, and Dr. EWART replied.

The list of Fellows elected for office during the coming year is as follows:—President, Mr. Arthur Edward Durham. Vice-Presidents, Dr. John Brunton, Mr. Alfred Cooper, Dr. Richard Douglas Powell, Mr. Sydney Jones. Treasurer, Mr. Alfred Wiltshire. Librarian, Dr. William Henry Allchin. Honorary Secretaries, Mr. Alfred Pearce Gould, Dr. James Kingston Fowler. Secretary for Foreign Correspondence, Sir William Mac Cormac. Council, Mr. Samuel Benton, Dr. Thomas Lauder Brunton, Mr. R. Brudenell Carter, Mr. Samuel Cartwright, Dr. John Cavafy, Dr. Henry Radcliffe Crocker, Mr. John Henry Drew, Sir Joseph Fayrer, Dr. Heneage Gibbes, Dr. F. De Havilland Hall, Mr. Jonathan Hutchinson, Mr. Edward Lund, Mr. Francis Mason, Mr. Edmund Owen, Dr. Isambard Owen, Dr. Arthur Ernest Sansom, Dr. Charles Brodie Sewell, Dr. Thomas Gilbart-Smith, Dr. William Heath Strange, Dr. William Henry White.

Sir WILLIAM HUNTER then read his paper on the late Epidemic of Cholera in Egypt. This address was practically the same as one which was read before the Epidemiological Society, and has already appeared in our columns.—In the discussion which ensued, Dr. THEODORE ACLAND testified to the insanitary state of Cairo. He thought that confusion as to the contagiosity of cholera arose from want of definiteness in the use of the term contagious. He considered that cholera might be contagious though the contagium could not be demonstrated. Among the Army Hospital Corps in Egypt who were engaged in nursing the sick, the number who contracted the disease was three times greater than in the army generally. But with regard to the spread of cholera by water, he would point out that two battalions stationed a short distance above Boselak, on the Nile, suffered severely from cholera, while those who were stationed below suffered very slightly.—Dr. MARSTON said it was only possible in the course of a few minutes to advert to a few points. After briefly alluding to the study of cholera from the standpoints of the epidemiologist and local and clinical observer, he said that as regards Egypt direct importation had been disposed of; but was it meant that cholera had long existed in that country, manifesting itself occasionally epidemically in the intervals by slight and less severe forms? He doubted whether insanitary causes alone were capable of causing an epidemic of that disease. The cholera death-rate, increasing in Bengal in 1881, had in 1882 been greatly in excess of the average of the previous five years, and this epidemic influence or condition had not extended to the Punjaub. Had its movement had an effect on Egypt? If all the real and alleged cases from contagion were true, they would still form a perfectly inadequate explanation of an epidemic; and, as regards a cholera-infected water, it must be remembered that in India an epidemic always went from the plains below up to the hills, and contrary to the course of the rivers. Cholera often broke out first in the hospital of a station, and he thought that the continuous occupation of these buildings might have an influence.—Drs. HOGG, CULLIMORE, and SIMMS made a few remarks, and Dr. MURRAY repeated the arguments he had used at the Epidemiological Society.—Sir J. FAYRER thought the question of the mode of spread was still in abeyance. He could not believe that a small material entity had much to do with those vast epidemic waves which depopulated districts.—Sir WILLIAM HUNTER, in reply, said that cholera might spread against the water, or with it; against the wind and with it; in fact, it was governed by no special laws in these respects.

HARVEIAN SOCIETY OF LONDON.

A MEETING of this Society was held on Feb. 21st, Mr. George P. Field, in the chair.

Wet-packing in Scarlatinal Dropsy.—Dr. DAY read notes of a case of Scarlet Fever, followed by nephritis, convulsions, and death, temporarily relieved by wet-packing. The patient, a boy aged seven, was first seen by him on Oct. 1st, 1883, when he was covered with a bright scarlet rash, having been apparently in his usual health the previous day. The throat, cervical glands, and kidneys were severely affected, and albumen and blood appeared in the urine. On the 18th scarlatinal dropsy set in, which almost disappeared under wet-packing. On the 20th there were diarrhœa and vomiting. On the 23rd the patient was seized with convulsions and died. Attention was drawn to the extreme brightness of the rash, which was distinct on the tenth day of eruption, and to the dropsy, which the author did not consider frequent when the skin was so much involved. He thought the wet-pack was of great advantage in exciting free cutaneous action and in relieving the anasarca. He also alluded to cases of scarlatinal dropsy without albuminuria, and quoted several authorities on the subject.—

The PRESIDENT, in commenting on the paper, referred to the frequency of suppuration within the tympanum after scarlet fever, and to its treatment by early paracentesis.—Dr. MAHOMED called attention to the present rarity of post-scarlatinal dropsy as compared with former returns; at the Fever Hospital hardly more than two or three cases were recorded in the year. This result he attributed to the early treatment of the nephritis, none being more successful than sharp purging and leeches to the loins. Dr. Mahomed bore testimony to the usefulness of Dr. Oliver's test-papers (mercuric-iodide) as a ready means of proving conclusively the absence of albumen from any urine.—Dr. CLEVELAND insisted on the therapeutical value of the perchloride of iron in cases of hæmaturia.

Prognosis in Structural Diseases of the Heart.—Dr. BROADBENT read an important paper on Prognosis in Structural Disease of the Heart, in continuation of the subject of the recent Harveian Lectures, in which prognosis in valvular disease had been mainly considered. The paper dealt with the conditions of fatty degenerations of the heart and of cardiac dilatation in an exhaustive manner, which does not admit of any adequate report being furnished here. It is understood that the paper will be published shortly.—An able discussion, in which Dr. STEPHEN MACKENZIE and Dr. MAHOMED took part, was followed by a reply by Dr. BROADBENT, and the meeting was adjourned.

ACADEMY OF MEDICINE IN IRELAND.

A MEETING of the Surgical Section was held on Jan. 11th. After the exhibition of living and card specimens,

Mr. WM. STOKES read a paper on the Radical Cure of Hernia by Peritoneal and Intercolumnar Suture. Having alluded to the fact that the subject of the radical cure of hernia had from remote antiquity to the present engaged attention, he mentioned that although it could not be said definitely that the wished-for goal had been attained, still, thanks to Listerism, much had been gained. In proof of the fact that the feasibility of obtaining radical cures by operation is a question *sub judice*, he referred to the writings of various eminent surgical authorities, some of whom are opposed to, and others in favour of, such attempts being made. The object of the various operations hitherto performed—namely, obliteration of the neck of the sac with approximation and union of the tendinous structures about the hernial passages, and also the methods of "dissection"—was discussed; and the author believed that the method recently adopted by himself and his colleagues was simpler and more efficacious than any of those he mentioned. It consists in the insertion through the open neck of the sac and close up to the external abdominal ring of a deeply indented carbolised catgut suture or sutures, according to the size, width, and depth of the neck, and this is followed by the approximation or closing of the canal and pillars of the ring by the insertion of two or more sutures of a stronger or more durable material, such as chromicised catgut, gilt or silver wire. In fact, it was a dual system of suture, one being peritoneal and the other intercolumnar. Four cases were recorded in which this plan was adopted. In three of these successful results were obtained. The unsuccessful case was one of congenital inguino-scrotal hernia. The hernia reappeared three months after the operation. The failure was probably due to not having used a sufficiently durable material for closing the pillars of the ring, that which the author employed being chromicised catgut. In future he would employ in similar operations either carbolised silk or silver wire.

Mr. BARTON also read a paper on the Radical Cure of Hernia. At the outset he laid down the principle of treatment—viz., that the internal ring should be so effectually closed as to prevent the hernia coming down into the canal at all. He described Wood's operation as a combination of this and of the old plan of invagination, which latter should be discarded and the closure of the rings perfected. The direct operation was recommended, freshening the edges of the ring, as recommended by Gross, or cutting away the sac, as prescribed by Czerny.

Mr. KENDAL FRANKS read a paper on the Radical Cure of Hernia by the Method of Dissection, the name which has aptly been applied to it in Dublin. The only two methods which seemed to him to give promise of extensive application in the future were (1) suture of the abdominal openings without removal or ligature of the sac, and (2) suture of the abdominal openings after excision of the sac. The first of these operations was applied to recent herniæ before the sac had had time to become enlarged and thickened. The method consisted essentially in cutting down on the tumour, carefully exposing the sac, which should be returned into the abdomen, and then drawing together the openings by means of two or three sutures of stout silver wire, which should be left permanently in position. He advised that the skin should be drawn slightly upwards before the first incision was made, as by that means the skin would not lie directly over the wires. Thus union by first intention was promoted, and the permanent retention of the silver wire assisted.

Mr. W. THORNLEY STOKER said there were two distinct classes of cases, the class in which operation was compulsory where strangulation existed, and the class where operation was a matter of election to promote the patient's convenience rather than save his life. In nearly all cases of operation for femoral hernia a permanent cure had been effected; but in large inguinal ruptures a radical cure was not so frequent, and in such cases the peritoneum should be sutured. In the second class of cases he advocated Wood's operation. He did not think it mattered much whether the pillars of the ring were drawn together or not. A cure was effected by the inflammation exciting the exudation of coagulum and lymph which drew the parts together, thereby closing the opening as with a cork. He protested against leaving in the wire suture where the ring was sutured in inguinal hernia as most unscientific and a possible source of future trouble.—The PRESIDENT mentioned the result of nine cases in which he had operated by different methods. In a case of inguinal hernia on the left side, in a male, he exposed the neck of the sac. He then drew it down and applied a ligature, divided the neck and removed the sac below the ligature. This case was successful when seen two years afterwards. He performed a similar operation in the case of a female suffering from a small inguinal hernia in the centre and above Poupart's ligament which became strangulated, and she was perfectly cured, having been seen five years afterwards. In a femoral hernia on the left side, in a female aged eighteen, he opened the sac, pulled down, excised, and closed the edges, and the result eighteen months afterwards was most satisfactory. He adopted the dissection method in other cases, but without improving the hernia. In cases where the canal was greatly distended by a large hernia it would be almost impossible to have a radical cure follow any radical measure, and the most likely was by excision of the sac.—Dr. MCARDLE observed that it was almost impossible to bring the edges sufficiently close together to keep behind the sac, and that the irritation of the veins was likely to produce phlebitis. Having regard to the lateness of the hour, the further discussion was on the motion of Mr. Ormsby, seconded by Dr. MCARDLE, adjourned to a special meeting.

A meeting of the Medical Section was held on Jan. 18th.

Dr. H. V. DILLON read a paper on a case of Bronchitis and Emphysema, with loss of taste and partial loss of deglutition, subsequent to injury of the upper cervical vertebræ. The facts were these:—D. S——, a pensioner, aged thirty-eight years. Health always good till injury was received. Served seventeen years in the British army, during which time he suffered from dysentery and ague; had had gonorrhœa, but no specific disease. On Jan. 17th, 1881, as he was sitting on the forecastle of a ship, a sailor fell from the yardarm on to the back of D. S——'s head, bending it and his neck forwards. D. S—— felt at the time as if something had given way at the back of his neck. He heard a noise at the seat of injury, and then became unconscious, remaining so for about fifteen minutes. On coming to he felt excruciating pain at the seat of injury, which lasted for six months and radiated along the back of the head. At the expiration of this time a hardened enlargement was remarked at the back of the neck over the three upper cervical vertebræ in the mesial line. A few months subsequently he got an abscess of the left internal ear, which discharged externally from July, 1881, to July, 1883. The auditory canal became almost completely closed, and hearing was lost at that side. Subsequently cough and dyspnœa came on, and have lasted since. The lungs are emphysematous, and he suffers from bronchitis, hoarseness of the voice, impaired power of deglutition, and partial loss of taste. Five months after the left ear trouble ulceration took place in the upper gums, the teeth loosened, and later on there was necrosis of the alveolar process of the superior maxilla,

a portion of the bone coming away when the teeth were extracted. The hard palate then ulcerated. The respiration is of a harsh and blowing character, pointing to paralysis of the soft palate. About six or eight months ago there was a circumscribed patch of congestion at the base of the left lung, which disappeared on treatment. He had lost flesh considerably since the accident, but had no signs of paralysis. The swelling at the seat of injury was now confined to the right side, having disappeared from the median line within the past year. He could not rotate the head completely to either side. Dr. H. KENNEDY asked if there was any evidence of abscess about the nape of the neck.—Mr. W. STOKES having seen the case said it was one of extreme rarity. The view suggested that it was a case of cervical dislocation could not be maintained, having regard to the complete absence of symptoms of motor paralysis. He considered the injury resulted in osteitis and periosteitis of the upper cervical vertebræ, and that this process extended upwards, involving the temporal bone and subsequently the superior maxilla on the left side, and that this was followed by caries. He asked if there was any trace of a syphilitic taint.—The PRESIDENT considered the case of great interest.—Dr. DILLON, in reply, denied the existence of any abscess on the neck or of any syphilitic taint in the patient, and considered that the symptoms might be referred to stretching of the atloidoaxoid ligaments and consequent inflammation.

Dr. J. HAWTREY BENSON read a case of Poisoning by the Ingestion of Tainted Meat. The patient had eaten about an ounce of roast turkey, which was somewhat high. Immediately afterwards he felt nausea, fetid eructations, &c., but the symptoms did not reach their maximum severity till about twenty-six hours after. At that time he was extremely faint; pulse 92, intermittent, scarcely perceptible, and extremely compressible; first sound of heart very weak, second sound quite inaudible even at base; præcordial anxiety and feeling of pressure akin to pain at heart; pupils dilated; vision dim; headache severe; the skin was cold but dry; throat dry and sore; articulation very difficult; tympanites great; severe abdominal pain; tenderness along descending colon; and constipation. Four hours afterwards his pulse was 104; temperature 101·8°. During the succeeding night he suffered intense fever symptoms, with very marked dryness of skin and mucous membranes. Towards morning he had two very copious watery scalding evacuations, followed by prompt and great relief to all symptoms. During the night he passed a large quantity of urine, sp. gr. 108, containing, in 1000 cubic centimetres, 34 grammes of urea and 1·39 grammes of uric acid; no sugar; a trace of albumen. Next morning the patient was convalescent, and some days after exhibited a subnormal temperature. Dr. Benson then discussed the question whether the case was one of "septic poisoning," by the absorption of some of the ptomaines, or of "septic infection" caused by the entrance into the blood and by the multiplication therein of a specific micro-organism. He referred to the cases described by Van der Corput, to the Welbeck and the Nottingham cases examined by Dr. Klein, and to the Wexford cases investigated and published by Dr. Charles A. Cameron, and expressed an opinion that the symptoms in the case he had just described were produced by the cadaveric alkaloids, his chief reasons for this opinion being the rapidity with which the acute symptoms disappeared after copious evacuation, the dilatation of the pupils, the extreme lowering of arterial tension, the dryness of the mucous membranes, and the very rapid convalescence.—Dr. CAMERON said that as he was himself the patient referred to, he had painful remembrance of the circumstances of the case. He never felt so near dying. He had cold sweats and felt utterly prostrate, and he had great difficulty in walking. He suffered intensely during the two nights. During the first he did not sleep at all, and only obtained about an hour's rest on the second night. He had intense thirst and suffered great pain. His urine immediately on being passed became quite thick. His mind was quite clear, but he found it difficult to articulate his ideas.—Dr. H. KENNEDY thought that at the time the patient took the tainted meat he was so mentally depressed, and being inclined to gout, he was unfavourable to resisting any disease. With reference to the absence of the second sound of the heart, he had frequently remarked this to be the case in the last cholera epidemic.—Dr. FINNY thought Dr. Kennedy's remarks as to the absence of the second sound of the heart proved the converse of his proposition; because, while cholera was preceded by evacuation from the intestinal canal, in this patient there was no loss of the usual fluid circulating in his body. He could not understand any reason for the absence of the second sound in this case.—The PRESIDENT and Drs. DILLON, J. E. KENNY, and W. A. CARTE joined in the discussion, and Dr. BENSON replied.

MIDLAND MEDICAL SOCIETY.

A MEETING of the above Society was held on Feb. 6th.

Dr. CARTER read a paper on a case of Rheumatic Fever with Hyperpyrexia which was successfully treated by the graduated bath. There had been three previous attacks of rheumatism, in the course of which the mitral orifice of the heart had become affected. The temperature rose suddenly to 106° F., was brought down by the bath to 99·5°, and never rose again above 102°. There was marked delirium, the onset of which preceded the hyperpyrexia by nearly twenty-four hours.

Dr. MALINS read a paper on the Influence of Civilisation on Childbirth. The custom of various tribes and countries in the conduct of natural labour were briefly sketched, and the difference in the mortality for respective classes of human and animal life dwelt on. The influences of an adverse kind were shown to be mainly due to the adaptation of the human female to the erect position, the complicated structure of the human placenta, and the diseases engendered in early life, especially of the bones.

Dr. MALINS showed a specimen of a Fibroid Polypus of the Uterus weighing nearly three ounces. The patient from whom it was taken had symptoms for two years thought to be attributable to malignant disease. The polypus was removed with scissors; recovery was immediate.

Dr. MALINS also showed the Ovary and Tube taken from a patient, single, aged twenty-two, from whom the other ovary was removed fifteen months previously without relief. The ovary was three times the natural size, with numerous cysts. Perfect recovery and complete cessation from pain followed the operation.

Dr. CARTER exhibited a specimen of Laryngeal Perichondritis. Tracheotomy had been performed which completely relieved the dyspnœa, but the patient died from septicæmia. An ulcer was found on the posterior extremity of the right vocal cord, which had extended to the cricoid cartilage, the periosteum of which was separated from the cartilage by pus. There was no evidence of phthisis or syphilis.

Dr. WINDLE showed sections of Cholera Kidney; there were no bacteria present, but the epithelial cells were very distinct with large nuclei.

Mr. EALES showed two male patients from each of whom he had successfully removed a Piece of Iron from the Vitreous Chamber of the Left Eye by the Electro-magnet. Their ages were twenty-five and twenty-six years. In each case the wound, about a quarter of an inch in length, was situated at the junction of the cornea and sclerotic; in each the lens had escaped injury. In one case the wound was situated at the outer side of the eye, the root of the iris being scarcely involved. Attempts to find and extract the foreign body by means of forceps had been made unsuccessfully by the local surgeon to whom the patient first applied. On first introducing the magnet a small grain of metal adhered to it, and was removed. Two or three subsequent unsuccessful attempts were made before the larger piece, a quarter of an inch long, was removed. In this case acute iritis and cyclitis followed the operation. The eye was, however, now free from pain on pressure. V. $\frac{20}{100}$, though the vitreous was full of floating opacities. In the other case the iris was wounded and prolapsed, and was therefore excised before introducing the magnet, to which a large piece of metal at once adhered, and was removed readily. This case did well. V. $\frac{20}{70}$; no pain. Mr. Eales pointed out that in these accidents it was usually the left eye which was injured. He considered that both the eyes had been saved by the electro-magnet. He thought the commonest cause of failure of the electro-magnet was impaction of the foreign body in the sclerotic. Delay in the use of the magnet usually resulted in complete destruction of the eye, while the early use of the magnet gave promising results.

THE coroner's jury have brought in a verdict of wilful murder against the man who is charged with cutting the throat of a nurse in the Mill-road Workhouse Hospital, Liverpool, on the 24th ult.

Reviews and Notices of Books.

On Bedside Urine Testing. By GEO. OLIVER, M.D. Lond. Second Edition. London: H. K. Lewis. 1884.

THE interest taken by the profession in matters connected with the clinical investigation of disease is shown by the demand at an early date for a second edition of Dr. Oliver's little book on "Bedside Urine Testing," in which he explains the uses and reactions of his various test papers. There can be no difference of opinion as to the value of these test-papers to the busy members of the profession, especially those who live at some distance from their patients, when it becomes a necessity to make at least a preliminary examination of the urine on the spot; and when attention is paid to Dr. Oliver's directions, no doubt need be raised with regard to the accuracy of these results. Dr. Oliver in his present edition introduces us to a quantitative test for albumen by comparing the opacity produced in an albuminous urine with a standard of opacity which represents a known percentage of albumen. The means of defining the limit of the selected standard is provided by a piece of opaque glass, possessing exactly the required degree of opacity. The process is as follows: All the albumen in a measured portion of the urine is precipitated by one of the test-papers, and then if the opacity exceeds the limit provided by the opaque glass, water is added until the standard percentage of albumen is reached. To make the calculation, the number of times the volume of the urine has been increased by dilution, and the known value of the standard, according to the test-paper used, are multiplied together. Dr. Oliver contends that the margin of possible error to which this mode of observation is liable does not exceed the mean between ·12 and ·1 per cent. The little volume is exceedingly well got up, and is portable and convenient for use.

The Operative Treatment of Intra-thoracic Effusion. By NORMAN PORRITT, L.R.C.P.Lond., M.R.C.S.Eng. Being the Essay to which the Medical Society of London awarded the Fothergillian Gold Medal, 1883. Pp. 307. London: J. and A. Churchill.

IT is no cause for wonder that the adjudicating committee of the Medical Society marked their sense of the merits of the work by awarding to its author the distinction entrusted to them to confer. An epitome of nearly all that has been written on the subject is given in simple and graceful language. The matter is well arranged; each contested theory and mode of practice is handled with considerable skill, and the author states clearly and precisely the results of his own numerous investigations. The question of intra-thoracic effusion is well worn, and one difficult to handle in an original way; but Mr. Porritt has successfully grappled with the problem. The opening chapter is devoted to a description of the anatomy of the chest. Then follow others discussing the operative treatment for pleuritic, pericardial, and mediastinal effusions. The appendix contains an account of clinical cases, and several statistical tables. We are glad to find that Mr. Porritt limits the term "thoracentesis" to the opening of the chest cavity by incision, and "paracentesis" to the closed methods of evacuating fluids. We can conscientiously recommend the book to the attention of every medical practitioner as a trustworthy practical guide.

The Refraction of the Eye. A Manual for Students. By GUSTAVUS HARTRIDGE, F.R.C.S. With 87 Illustrations. Pp. 204. London: J. and A. Churchill. 1884.

AMONGST the numerous manuals that have been written to aid the student in the recognition of errors of refraction in the eye and of determining their amount, we should be inclined to place this work in the foremost place. It is evidently written by one who is thoroughly master of the subject, and who, as is usual under such circumstances, wastes no space in useless explanations; but, presuming that the reader has a rudimentary knowledge of optics, the book affords precisely the information required in exceedingly clear and intelligible terms. It contains some chapters, as those on retinoscopy and on astigmatism, which even those who are familiar with ophthalmic work may study with advantage. The numerous and particularly clear, well-cut, and well-printed illustrations are extremely useful in enabling the statements made in the text to be followed. The work commences with a chapter on optics, in which the principles of reflection of light by mirrors and its refraction by lenses are briefly explained. The next chapter is devoted to the refraction of the eye, and the subjects of accommodation and convergence are fully treated. Succeeding chapters deal with the methods of diagnosing, estimating, and correcting errors of refraction; with retinoscopy, hypermetropia, and aphakia; myopia, astigmatism, and anisometropia; presbyopia and paralysis and spasm of accommodation; and, lastly, strabismus, asthenopia, and the selection of spectacles; various instructive cases are given.

Our Own Country; Descriptive, Historical, Pictorial. London: Cassell, Petter, Galpin, and Co.

UNDER the above title Messrs. Cassell have published a work in six volumes in which some of the most interesting and important places in Great Britain are described. Natural scenery, great commercial cities, ancient castles, abbeys and manor-houses, primeval antiquities like Stonehenge, the old existing harbours of the country, battlefields, cathedrals, and great churches are among the chief subjects described in "Our Own Country." The reproach that Englishmen know the lakes of Italy better than those of Killarney or Cumberland, the mountains of Switzerland than the Highlands of Scotland, has in these days of railways and easy modes of access to remote districts lost a good deal of its truth, but even yet there are many who, possessing ample opportunities, are ignorant of the beauties of their native land. To such we can recommend the perusal of this work as being well calculated to excite their interest, and to raise a desire to see some of those pictures of nature so fully described and so well illustrated by woodcut engravings in the book under notice. To another class of readers, too, this work will be serviceable. We allude to those who in the past have seen some of the beauties of British scenery, and before whose minds the descriptions and engravings in Messrs. Cassell's production will call from the memories of the past recollections of days spent in their midst. There is no part of Great Britain without its own interest; and where the scenery is least attractive the district itself may have a history, or a connexion with important events, sufficient to induce a visitor to linger on the flattest plain or to penetrate the recesses of the dreariest marshland, and in the work before us this history or connexion is laid before the reader. As an example, we may instance the remains of Crowland Abbey, which lies in the heart of a country which can hardly be described as picturesque, but a description of which must be read by all who wish to understand a remarkable chapter in the earlier history of England. Ludlow Castle, again, grand as is its natural position, becomes infinitely more impressive as we trace the long series of its castellans, and the history of the events which have occurred within and under its walls; a great house like Woburn, and a noble family like that of Russell, take new interest and attraction after we have studied the stately Vandycks which set before us the Earls and Countesses of Bedford "in their habits as they lived," and here follows the story of the house from the days of Henry VIII. to those of Queen Victoria. The woodcuts are of high quality and numerous;

the letterpress copious and, so far as we have been able to test it, accurate; and the information given is varied and valuable. A regular topographical arrangement has not been attempted, because it is believed that greater interest is to be obtained by a varied distribution of subjects. In our opinion, however, such an arrangement would have been preferable, as it would have facilitated reference and rendered more easy the task of those who, desiring to learn something of a district, as opposed to a place, to which a visit is intended, may turn for information to the pages of "Our Own Country."

COPENHAGEN AND THE INTERNATIONAL MEDICAL CONGRESS OF 1884.

As the readers of THE LANCET will remember, it was decided, at the last International Medical Congress held in London, that the next meeting should take place in one of the capital cities of Scandinavia, and that it was left to Sweden, Norway, and Denmark to arrange amongst themselves which it should be. Accordingly the leading medical men of Stockholm, Christiania, and Copenhagen soon after corresponded on the subject, the result being that, for various reasons, the choice fell upon Copenhagen, which possesses the additional advantage over the other two of being the largest town and the nearest centre to the Continent. However, it was not without hesitation that the medical men of Copenhagen took upon themselves this honour. Many had but recently returned from the International Medical Congress in London, and could but feel how futile any effort on their part would be to equal the magnificent entertainments which the generous hospitality of their English colleagues and friends had provided for them. On the other hand, they indulged the hope that foreign medical representatives would remember that it is impossible for a town of the size of Copenhagen to offer hospitality to visitors on the same scale as London. They, however, unanimously resolved to invite the International Medical Congress to hold its meeting at Copenhagen in August this year. As more than four hundred medical men have already accepted the invitation, the more prominent of whom will be mentioned later, and as many representatives from England are expected, it may be of interest to the readers of THE LANCET to receive some information as to the coming Congress and other matters concerning Denmark and Copenhagen. It will, therefore, be the object of this and the following articles to furnish this information in as brief and useful a form as possible. Although many Englishmen travel through Denmark in the summer, the majority of them hardly ever hear anything of this country. It seems to be the fate of all small nations to be half forgotten, or, what is worse still, to be misunderstood. As a proof of this the following incident may be related. At a dinner party given in connexion with the last International Medical Congress, an English medical gentleman asked his Danish colleague if Danish doctors were not obliged to pass their examinations in Germany. Being told that Denmark had not only nothing whatever to do with Germany, but that it possessed a university with about a thousand students, the Englishman was very much surprised; but the surprise of the Dane was still greater when he was further asked if Latin was the language usually spoken in his native land. Many Danes having had a similar experience, it has become a general belief amongst them that Denmark, in a foreigner's idea, is an arctic region, and Copenhagen a small town with wooden houses and narrow streets, which are the haunt of the Polar bear. This of course is an exaggeration; still strangers seem to be unable to realise that Denmark is blessed with all the institutions, comforts, and conveniences of modern civilisation; that its people actually possess those very characteristics which are generally considered distinctive of English people; that the country has much the same climate and well-nigh equally fertile soil as England; that the features of its landscapes, with the exception of its flatness, remind one of scenes in England; and that in its woods and in the picturesqueness of its coast line along the Sound it may be said even to rival English scenery.

It need scarcely be said that the people of Denmark speak Danish, a language which much resembles English—so much so that the Professor of English at the University of Copenhagen, himself an Englishman, considers the two languages to be merely two different dialects. It is, however, not very probable that the English medical gentlemen who intend coming to the Congress this summer will be able to understand Danish, as the pronunciation is very different from their own; but most educated Danes understand English and speak it pretty well, and in shops, restaurants, tramcars, &c., Englishmen will often find people who understand them. The people as a rule are very polite to foreigners, good-tempered, and quiet—so much so that many will think them slow, as it is rather the exception than the rule to see such busy people as one sees in London at the railway stations, in the city, and the principal thoroughfares. Although Danes are not very energetic and active—at least, compared with the English—they are by no means ill-endowed with natural gifts; on the contrary, they are clever and intelligent. In proportion to its size, Denmark can boast of many famous men—e.g., the great sculptor Thorwaldsen—an immense collection of whose beautiful works forms one of the finest museums in the world; the poet H. C. Andersen, whose works are translated into nearly every language; and Oersted, the well-known discoverer of electro-magnetism. Amongst well-known medical men of the past the following are worthy of mention:—Ole Worm, who died in 1654, and was the first who described the ossicula intercalaria s. Wormiana; Thomas Bartholin, who died in 1680, was the discoverer of the lymphatic vessels; Winslow, who died in 1760, was professor of anatomy in Paris, to which city he removed after his perversion to Roman Catholicism; Callisen, who died in 1824, was the first to perform colotomy in the left lumbar region; and Jacobsen, who died in 1843, was the first to construct a strong and useful instrument for lithotrity, and first described the tympanic nerve, which is therefore also called nervus Jacobsonii.

Denmark possesses one university, that of Copenhagen, which is more than four centuries old. It differs from the English universities in many respects. It embraces all branches of science, having about sixty professors and lecturers, of whom fourteen belong to the medical department, or faculty, as it is called. There are besides many private lecturers. The university offers free education to all. The public lecturers are supported by the State, receiving an annual Government grant. The private lecturers receive neither Government grant nor students' fees, but work entirely *honoris causâ*. The students, in fact, pay no fee whatever, either to the university or to the lecturers. Thus a university education is within the reach of even those with the smallest incomes. Moreover, as the State supports the university, so to a large extent it supports the students with a money grant and free lodging. There is a large old building called "Regensen," which was built more than 200 years ago, where a hundred students live gratuitously and receive, besides, a small grant of money every month. There are also smaller houses erected by private people for the same purpose. In addition, there are public and private funds to help the poorer students in the purchase of either books or instruments, such as microscopes, &c. Special funds are raised by the State and by private people to assist persons who begin to study at a more advanced age, and to assist women who intend going in for university education. The great support given to the university by the State and by private scholarships is certainly unequalled in any other country, and would doubtless produce bad results if it were not impossible for the students to avail themselves of it without having previously gained first-class certificates, and having generally distinguished themselves by their industry. It is, however, certain that the system has this good effect: it prevents the monopoly of knowledge by the richer classes, and as many Government posts can only be filled by university men, it secures to the State a large body of educated and able men from whose ranks to select well-qualified officials.

The students usually enter the university at the age of eighteen, after having passed a certain examination at the schools, either public or private, and leave it at the age of twenty-five. As many students come from the country or the provincial towns, which are nearly all very small, and as they come direct from school, it will be easily understood how great a change it generally is for the youths to come to a large town, where they often have no friends to look after them, and where there are so many enticements from study. However, the *rôle* of the prodigal son seems to be no favourite

one with the student youth of Denmark, for although students live under very little control, even in the free students' homes, and the whole English system of tutors, &c., is totally unknown here, still there are comparatively few for whom the pleasures of the city have so much attraction that they fail in at least completing their university career. A Danish student lives very differently from his English brother. He knows very little of sport; one of his greatest recreations is to go in the evening to the great students' club, where he spends his time in discussing everything between heaven and earth with his fellows, enjoying the while his long pipe and his beer or punch. Like the generality of his countrymen, he is ardently devoted to the Muses. The students' singing club is renowned for its concerts, which are as popular as successful. Amongst the members of these clubs may often be seen men of advanced age, who still retain a warm affection for the haunts of their youth. The material difference between English and Danish students seems to lie in the fact that while the Englishman's amusements consist of out-door sports, the Dane's are of a more sedentary and in-door nature.

The female students in Denmark are as yet but few. They attend exactly the same lectures as the male students, and nothing is especially arranged for them. This system up to the present has answered very well.

In Denmark nobody is allowed to practise as a medical man unless he has passed a certain examination at the university. There are not in Denmark, as in England, different medical schools, institutions, and examinations for surgeons and physicians; all who wish to practise as medical men must pass the same examination and prove proficiency both in medicine and surgery. The medical education is very thorough, and extends generally over six or eight years. The theoretical part is given at the university, the practical at the different hospitals, of which one, Fredrichs Hospital, is connected with the university, so that its physicians and surgeons are always professors at the university; the greater part of these gentlemen give only clinical lectures and hold examinations. The medical student who enters the university attends lectures on philosophy the first year, and then passes an examination on this subject. Besides preparing himself for this examination, he also studies chemistry, botany, zoology, and natural philosophy, which are the subjects for the next examination, generally passed half a year or one year later. From this time begins the medical education proper, the students being in the hospitals as clerks and dressers during the morning, and attending lectures during the afternoon. The greater part of the lectures are held in a building lying separate from the university, close to Fredrichs Hospital; it is called the Surgical Academy, and contains a large anatomical theatre. The collections &c. connected with the Surgical Academy are but small compared with those in London, and will hardly afford any interest for English medical men. Five to seven years after having entered the university the medical students pass an examination in anatomy, with dissection, physiology, and pharmacology; and one year later the final examination in medicine and surgery, both theoretical and practical, in morbid anatomy, with necropsies, in midwifery, and medical jurisprudence, in which latter the candidate has to write a paper on a given subject. Ultimately the candidate must write a paper on some given medical, and another on some surgical, topic. He is allowed four hours for each. Much attention is paid to the practical education, the candidates being obliged to produce certificates of attendance at a certain number of hospital clinics, and never receiving a first-class character unless he has passed the examinations in clinics of medicine and surgery well, even if he has obtained the highest marks in all other branches.

It will thus be seen that both the theoretical and the practical medical courses in Denmark are very thorough. But, in addition, the majority of medical men, before commencing their practice, take situations at the hospitals for a year or two as house-physicians and house-surgeons, these posts being numerous in Copenhagen. It is only after this experience that a Danish medical man considers his education complete. Further, a small number take their degree, which differs a great deal from that in England. Nobody can go in for this without having finished his university education with first-class character. Everyone who aspires to the rank of M.D. must prove his scientific knowledge by a work on some medical subject, the choice of which is in his own hands, which work must be submitted to the Faculty of Medicine for approval. If accepted the book is then printed, in this form often exceeding 200 pages, and numerous copies are distributed amongst the author's colleagues. On a fixed day the aspirant to honours is obliged to publicly defend his opinions, first against two opponents, professors chosen especially by the university, and afterwards against anyone who may wish to break a lance with him. Several essays are refused in the first instance, but when once accepted few fail to gain their title through a bad defence. Having then become M.D., the Danish doctor contents himself with his general practice, or, if of more ambitious mould, aspires to higher rank—namely, to that of professor, physician, or surgeon at one of the large hospitals.

"AGARICINE."

To the Editor of THE LANCET.

SIR,—With reference to your recent annotation on Agaricine, may I venture to point out that the use of agaric and its active principle in the treatment of the night-sweating of phthisis is by no means new. By agaric I mean, of course, the agaric of the larch, white agaric, or purging agaric, the "agaric blanc" or "agaric purgatif" of French writers, and the "Lärchenschwann" of the Germans. It was introduced as a remedy for sweating by Dahen, and its action is fully described in his "Ratio Medendi," published about 1760. Barbut's cases, observed in 1776, attracted considerable attention, and established the reputation of the drug. Murray, in his "Apparatus Medicaminum" (1790), speaks of it as a generally recognised mode of treatment. Burdoch, writing in 1830, states that it is of much value in many cases of consumption. The best known work on the subject is Bisson's monograph, published in Paris in 1832, giving an account of fourteen cases, all of which are reported with the greatest care. It was largely used by Andral at the Hôpital de la Pitié, his results being recorded by Max Simon. Trousseau employed it extensively, and a good account of its therapeutic action will be found in the various editions of his well-known work on Materia Medica. In the French Pharmacopœia it is described under the name of "agaric blanc officinalis" or "polypore de Mélèze," two preparations being made officinal, the powder and the liquid extract. In America it seems to be well known, a description of its action and uses being found in the National Dispensatory of Stillé and Maisch. Among more recent writers on the subject may be mentioned Peter of Paris, Wolfenden of the Charing-cross Hospital, and Young of Glasgow. Dr. Gairdner uses the active principle agaricine, and finds that it not only checks sweating, but allays cough and promotes sleep. During the last four years I have given agaric in nearly 200 cases of phthisis, and am well satisfied with the results.

I am, Sir, your obedient servant,

WILLIAM MURRELL, M.D.

Weymouth-street, W., March 3rd, 1884.

THE MEETING OF FELLOWS AND MEMBERS AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Last week you stated that in all probability the President of the Royal College of Surgeons of England would summon a meeting of the Fellows and Members, to be held at the College on Monday, March 24th. My object in writing to you is to state that not only in my opinion, but in that of many others, Monday is a most inconvenient day for the great body of provincial medical men to travel to London; in fact, if the day is not altered it will be almost prohibitory to many who are anxious to be present. I would, then, in your columns, respectfully ask Mr. Marshall, the President, if he will kindly consider the convenience of a large body of medical men by selecting another day later on in the week for holding what I believe will be a great and important gathering.

I am, Sir, yours faithfully,

Wolverhampton, March 4th, 1884. VINCENT JACKSON.

*** The inconvenience alluded to may obviously be great in the case of many provincial practitioners, and doubtless the President and Vice-Presidents will give the matter consideration.—ED. L.

THE LANCET.

LONDON: SATURDAY, MARCH 8, 1884.

SAUL among the Prophets was not a more incongruous phenomenon than Mr. HUXLEY among those who seek to bolster up the existing organisation of our Licensing Medical Authorities. But Mr. HUXLEY'S appeal on behalf of these authorities is clung to by them with remarkable tenacity. The current number of *Blackwood's Edinburgh Magazine* contains an article on Proposed Medical Legislation, in which the writer draws a contrast between the little change recommended by Mr. HUXLEY and the larger changes involved in the Medical Bill of the Government as it came down to the House of Commons. The writer in *Blackwood*, we need not say, writes from a Conservative point of view. It is almost equally unnecessary to say that he magnifies almost to exaggeration the proposals of the Medical Bill, including in his argument against it certain charges which seem to us unfounded. Mr. HUXLEY'S proposal of medical reform was very simple. He thought it a pity to interfere legislatively with any existing body, but would enact that all the existing examining authorities might give certificates admitting to the Register if they satisfied the Medical Council that they required full and efficient instruction and examination in Medicine, Surgery, and Midwifery, and if they admitted coadjutor examiners appointed by the Medical Council or other State authority. This plan is simple indeed. But for a man of Mr. HUXLEY'S thoroughness it is very disappointing. He would leave nineteen bodies to discharge duties for which three are not only ample, but for which more than three are costly and altogether objectionable: objectionable especially in their tendency to compete with each other, like rival "shops," as Sir DOMINIC CORRIGAN said; and costly in respect of the supervision they would require, but never obtain. It is lamentable to see Mr. HUXLEY so incourageous in adapting medical bodies to the nineteenth century, and sighing over a reasonable attempt to do so—sanctioned in the main by three Governments, by the Medical Council, and by a Royal Commission,—as if the Bill involved the destruction of the profession itself.

The writer in *Blackwood* sighs after so timid and inadequate a reform as Mr. HUXLEY pictured, and he magnifies, as we have said, the consequences of the Government Bill to existing bodies. According to him it will abolish the Colleges of Surgeons and Physicians and the Societies of Apothecaries. It will destroy the protection hitherto afforded against quacks. It will set up three examining boards in place of the deposed bodies, which, after finding a candidate competent, will have no title to give him, &c. This is the language of exaggeration and want of faith. It is a gross exaggeration to say that the Bill will destroy the existing Colleges, whatever it may do to the Apothecaries' Societies. These Colleges will have large representation in the Divisional Boards and in the Medical Council, and it is not to be doubted that they will very largely have the work of the primary professional examinations in their hands, as at present. Besides this—though we shall be no parties to denying the new order of licentiates a title expressing full qualification, and to excluding the definition of such a title from the Bill,—we have no doubt that there will be a profitable demand hereafter for the Memberships and Fellowships of Colleges whose Membership or Fellowship is a real and not a bogus distinction; for the writer we are criticising is too well informed not to know that certain of the Colleges whose reform he deplores have been thriving in part—and very large part—on the actual or virtual sale of qualifications and high titles. This writer should have admitted this fact, which has caused much scandal. But he is not uncandid in his admissions. As a writer in *Blackwood* he is not to be thought prejudiced against North Britain; he has, however, the following passage:—

"It is also true that the College examinations in that part of the United Kingdom called Scotland have gained a reputation among medical students of being more easily passed than those in England or Ireland, and that hence it has been a matter of constant occurrence for Irish and English students, who feared they might not pass in their own countries, to cross the Channel, or go over the Border, and return full-fledged practitioners; but these are clearly matters which call for the reform rather than the abolition of the Colleges."

In piling up the agony of reform the writer occasionally makes statements neither consistent with himself nor with the Bill which he professes to describe. Thus, in one part he states that compensation will be demanded from students for bodies whose examinations are superseded by the new final examinations. This is entirely erroneous, and would certainly be highly unjust. The protection against quackery, which is going to be abolished by the Bill according to this writer, passes our comprehension. We had thought that quacks and bone-setters and herbalists of all sorts thrive under the reign of the existing medical authorities. They could scarcely be better off under the new penal clauses, which will make medical titles a little more sacred than they are at present. We should agree with the writer in any reasonable amendments of the clauses relating to the registration of colonial and foreign practitioners, but surely we cannot long refuse to recognise our own colonial diplomas, or even such foreign diplomas as seem to our Medical Council to be granted on proper terms of education and examination, and by countries granting similar recognition to British practitioners. We can only, in conclusion, find space for one remark more. We firmly believe not only that all existing medical bodies worthy of perpetuity will survive under this measure, but that they will survive under more honourable conditions and with higher functions. And, besides these, we shall have some new bodies of great moment—the Divisional Boards,—which will not, indeed, have the interest of any one of the old medical bodies, but which will have the far higher interest of a body representing the wisdom of them all and the selfishness of none.

IN a recent article we discussed so much of the question as to the etiology of the epidemic of cholera in Egypt as related to Sir WILLIAM HUNTER'S contention that the disease had long been endemic in the country, and we were

bound to conclude that the evidence on which that view was based, being often nothing more than hearsay evidence obtained from irresponsible persons who had, in some instances, not even seen any of the cases of the disease they referred to, was not such as is usually accepted as the basis of a theory by those who are acquainted with the difficulties involved in similar inquiries, even when the information available is derived from sources above all doubt. In one sense, especially, we regret this, because we cannot help having a suspicion that there is some as yet unexplained relation between diarrhœa and cholera in countries where the latter disease prevails; and we by no means refuse to believe that the autumnal diarrhœa which affects this and other European countries, and which seems to have a specially firm hold on certain towns lying in low alluvial sites, may not be in one sense the counterpart of the outbreaks of cholera in the delta of the Ganges and elsewhere. There is, indeed, much similarity in the early history of the prevalence of both these affections; but as yet the materials necessary for a final opinion on such a point are certainly not forthcoming in the case of Egypt.

With regard to the possibility that the infection was imported, we entirely concur with Sir WILLIAM HUNTER that there is not a vestige of evidence to show that such a result ensued either in consequence of the movements of the now historic stoker of the *Timor*, or by reason of the arrival of the Indian contingent in the previous year. But we cannot regard the exclusion of these two sources of infection as setting aside the whole question of importation. Since Sir W. HUNTER'S report was issued we have received a thoughtful report on the same subject from Dr. W. Y. SIMPSON, who spent a brief holiday in Egypt last year, and he is of opinion that although no trustworthy evidence as to the endemicity of the disease was forthcoming, yet that cases of cholera existed in Damietta much earlier in the year than the end of June, when the first attack, which happens to have been certified as due to "acute gastro-enteritis," was officially admitted; and in regard to importation, he points out the noteworthy circumstance that several early cases of sickness and death of a similar type, and described under the same name, occurred amongst devout and religious people. Hence, he asks whether it is not possible that the Damietta outbreak was due to importation by pilgrims returning from El Hedjaz about December, 1882. If so, much of the sickness which, according to Sir W. HUNTER'S report, was heard of from the more trustworthy sources would be easily explained, and the epidemic development which ensued later on would admit of an interpretation far more in conformity with experience acquired both in Europe and in India. The outburst commenced about the time when the drinking-water was at its highest stage of contamination—namely, when the Nile, which acts as a sewer and as public water-service, being at its lowest point, was sluggish and all but stagnant, and it continued for the first few days after the Nile began to rise. That the Nile water affords an almost unfailing medium for the communication of such an infection, especially at this period of the year, is unquestionable. Writing as to this, Dr. SIMPSON, in speaking of the inhabitants, says, "Those who live in the houses on the banks of the Nile, or near the canal which runs through the town, empty their refuse into the water; they also wash their clothes, utensils, and themselves in the Nile or canal, and draw their drinking-water from the same source. I have seen a woman empty the filthiest liquid into the river, and another woman come immediately after and fill her pitcher with water for drinking purposes from the same spot before the water had become again clear. The Arabs do not filter their water, but prefer it from the Nile, with whatever it may contain." In short, we may take it that Dr. SIMPSON believes that importation, as by pilgrims from the Hedjaz towards the end of 1882, is by no means improbable; that from that date isolated cases of cholera took place, and often spread, especially in connexion with conditions favouring the pollution of drinking water kept in the filthiest of dwellings; that the great outburst in Damietta ensued at a time when the facilities for a general pollution of the drinking water obtained from the Nile were at their highest; and that it spread in a country abounding in conditions of filth which to a European are simply appalling. So far as the evidence now before us justifies an opinion, we are inclined to think that Dr. SIMPSON'S views merit a general acceptance; but his inquiry was limited to Damietta alone, and the information available as regards other places is insufficient to enable us to judge how far they may have been applicable to the epidemic as a whole.

On one point all observers are agreed—namely, that the sanitary condition of Egyptian towns and villages is gross in the extreme, and are such as specially tend to facilitate the spread of diseases such as cholera. According to Dr. SIMPSON, the site of Damietta is low; the soil, consisting as it does of alluvium deposited by the Nile, is damp and, after rain, swampy; and the air is laden with nauseating and miasmatic vapours constantly given off from stagnant pools filled with decomposing animal and vegetable matter. Green pools, the gases from the decomposition of which are constantly bubbling up, lie about, and excrement nuisances abound. To add to all this, the poor, who live largely on fish, seem to prefer it in a putrid state; during the cattle plague they devoured tainted and diseased flesh; and so they seem to have been prepared, in every sense of the word, to become victims of any filth pestilence. What the condition of other Egyptian towns may be can be judged of by the fact that, to the Arab's mind, Damietta is a healthy place, and that native physicians send their patients there as to a health resort. The British occupation cannot have accomplished all it should aim at, until a proper sanitary administration has been organised for the country; and judging from the official reports, it is evident that, for a time at least, this must be in British hands. All competent observers concur in the belief that to the measures of cleansing so admirably organised by Sir WILLIAM HUNTER the comparatively short duration of the late epidemic was chiefly due. This work was necessarily in the main of a temporary character; what is now wanted is a series of such permanent measures as are recommended in the British Commissioner's Report—measures which, without British help, the Egyptians will evidently have long to wait for.

THE domain of the surgeon is one that is ever widening, and it extends mostly in the direction of the organs contained within the three great cavities of the body. In the

abdomen there is hardly an organ, except perhaps the pancreas and suprarenal capsule, that has not now been surgically dealt with. In the cranial cavity the revival of trephining and its application upon sounder principles is accompanied by successful intervention in cases of cerebral abscess. But as regards the thoracic cavity, although the serous sacs have long been freely dealt with, there is still open a way for bolder and more effective treatment of certain diseased conditions of the lung. That there are conditions of this organ which would justify surgical interference, provided that the interference be practicable, there can be no question; and the sole consideration is whether the risk entailed by the measures is to be considered as of moment compared with the relief from suffering, or the chance given of prolonging life. Under what circumstances, then, is surgical interference justified in lung disease? That is the real question, which can best be answered by an appeal to what has already been done in this direction.

The plainest and simplest measure is the incision of the lung to evacuate and drain cavities or abscesses. Drs. POWELL and LYELL, in their paper referred to below, state that the procedure was advocated by Dr. BARRY in 1743; and according to KRÖNLEIN (vide *infra*) the evacuation of pulmonary abscesses was urged by GOTTLIEB RICHTER, who died in 1811, his opinion being fortified by the fact that BENJAMIN BELL had successfully performed the operation. But the question was allowed to lapse, and for the most part surgery was contented to deal with empyemata, sometimes after a spontaneous pulmonary fistula had been formed, and to trust chiefly to the natural evacuation of the contents of an abscess through the air-passages. But within the last decade much greater attention has been devoted to this subject, especially by MOSLER in Germany, PEPPER in America, and POWELL, LYELL, WILLIAMS, and others in England; and all that is wanted is a more precise code of indications for recourse to surgical procedure. It is indeed difficult to frame such a code, but there are certain things which should undoubtedly influence the determination. To deal with chronic cases first. It is doubtful whether it is necessary to tap the ordinary apical vomicæ of phthisis, which from their position are favourably seated for natural drainage; for even if the diagnosis of their limits were more precise than it mostly is, the artificial outlet might often come to be placed unfavourably for the object in view, which is of course to afford a free vent to purulent secretions, the constant passage of which over the bronchi, trachea, and larynx, is so liable to produce secondary ulceration. Still such tapping has been practised, and with benefit; and cases specially suitable for it may occasionally arise. The operation is more justifiable in cases of basic excavation, whether as the result of chronic pneumonia or of bronchiectasis, where the difficulties of complete evacuation by the act of coughing are very great, and often insurmountable; where accumulated secretion becomes putrescent, and where the risks to life from the setting up of secondary lobular inflammation and suppuration by "inhalation" are very real. It was on such a case as this that Dr. DOUGLAS POWELL and Dr. LYELL reported in the 63rd volume of the Medico-Chirurgical Transactions, 1880. The patient was much relieved by the operation, the expectoration remarkably diminishing, and life prolonged for six weeks, when it was terminated by an attack of pneumonia in the opposite lung. In that paper there will be found, in addition to a historical summary, a fair statement of the reasons for advocating incision in the case of basic cavities, with the precautions to be observed in dealing with them. A somewhat similar case, complicated however with empyema, was reported to the Clinical Society by Dr. C. T. WILLIAMS. In all such cases the chronicity of the disease militates against the hope of permanent good; but as a measure of relief pulmonary paracentesis under these circumstances is most certainly justified.

There is another class of cases in which the relief is more urgently demanded, and where the prospect, dark enough if the case be left alone, is made somewhat brighter by such intervention. It is the case of recent abscesses (we may exclude hydatids, whether suppurating or not; our Australian brethren have amply demonstrated the boldness with which these may be dealt with), and especially those of gangrenous origin. Unquestionably now and again such cases recover under careful restorative treatment; but the very nature of the disease, and the risks of secondary inflammation from the highly putrescent character of the sloughing tissue, limit the chances of recovery to a very few. When the diagnosis is assured, it does seem to us that surgical interference is not only justified, but imperative, in spite of the slender hopes of success. Dr. CAYLEY'S case at the Clinical Society in 1879, and Mr. SOLOMON SMITH'S case recorded in these columns (THE LANCET, Jan. 17th, 1880), were examples of this class; and although in neither did recovery ensue, yet the remaining days of life were rendered more tolerable, since the foul contents of the cavity were no longer evacuated at intervals by the wearing process of coughing. The subjects of pulmonary gangrene being usually those whose vitality is lowered from other conditions, much cannot be hoped from the surgeon's aid beyond this temporary benefit; still, the patient is placed in a condition more conducive to recovery.

It was hardly to be expected that modern surgery would stop here. Incision for the evacuation of morbid fluids and secretions is one thing; excision for the removal of diseased products is another and bolder step. That step also has been taken, and in two instances with a rashness which it is difficult to justify—where the greater portion of a phthisical lung was extirpated, one patient dying a few hours after the operation, the other surviving nine days, when disease was also found in the opposite lung. We are unable to give the precise reference to these cases, which are merely mentioned by Dr. KRÖNLEIN of Zurich, in a paper in the *Berliner Kliniker Wochenschrift* of March 3rd, upon this subject. He rightly judges that surgery goes too far in extending her operations to the phthisical lung; but he shows in the case upon which he did resect a portion of lung what is possible in another form of disease. The case was one of a sarcomatous tumour of the rib in a young woman. The growth sprang from the sixth rib on the left side, and was about the size of a child's head, and on June 26th, 1883, he removed the tumour, which was periosteal, and afterwards resected a portion (nine centimetres) of the rib. The wound was dressed antiseptically, and healed by first intention. On Dec. 10th the patient again presented herself with a local recurrence of three weeks' duration, but otherwise in good health. This

recurrent growth was removed on Dec. 14th, and was found, on reflecting the skin, to occupy the gap between the fifth and seventh ribs, to involve the pleura, and to be adherent to the lower lobe of the lung. In tearing down these adhesions the whole lung collapsed, exposing to view the pericardium and diaphragm. Owing to the dyspnœa which naturally ensued, the chloroform was abandoned. KRÖNLEIN then observed that there was a secondary nodule, the size of a walnut, projecting from the lung itself. He accordingly brought the organ up to the level of the wound, cut out the nodule with scissors, and arrested the hæmorrhage, which was but scanty, by a catgut ligature around the margins of the wound. The pleural cavity was washed out with salicylic solution, the outer wound closed by sutures, a drainage-tube inserted, and iodoform gauze and salicylic bandage applied. At the end of three weeks, and on the fourth dressing, cicatrisation was complete. He was astonished at the small amount of exudation from the pleura, and the rapidity with which the lung unfolded and the signs of pneumothorax disappeared. The temperature only reached 38·2° C. (100·7° F.) on two evenings, being at other times normal. The pulse and respiration rose to 140 and 60 respectively, after the operation, but fell to normal in a fortnight, and on her discharge from the hospital physical examination showed normal but weak breath-sound over the lung, and impaired resonance at the seat of operation, which also was slightly retracted with inspiration.

We quote this case in detail because it indicates a line along which surgery may perhaps advance, for it shows that tumours of the ribs may be excised, and even pulmonary growths also, with impunity. Whether Dr. KRÖNLEIN has succeeded in removing the whole disease is another matter. It is more than likely that he has not; but there can be little doubt that by his boldness he has prolonged life. Cases such as this are probably the only ones in which resection of the lung is justifiable; yet, in spite of this success, we doubt if surgeons in general will care to extend their operations upon this organ beyond the limits afforded by incision of suppurating cavities.

IF the hospitals of London are to be kept sacred as charities for the benefit of the poor, and are not to be turned into shops or hotels for those who can afford to pay, diligence will have to be used. The Charity Commissioners have very properly arranged to receive objections to the scheme by which admission to Guy's Hospital on terms of payment is to be sanctioned. The following advertisement will be read with interest by many.

"CHARITY COMMISSION.—In the matter of the Hospital founded by Thomas Guy, Esquire, in the county of Surrey, and in the matter of 'The Charitable Trusts Acts, 1853 to 1869.' By direction of the Board of Charity Commissioners for England and Wales, notice is hereby given that an Order is proposed to be made by them after the expiration of one calendar month, to be computed from the first publication of this notice, establishing a scheme authorising the admission into the said hospital of patients upon terms of payments. A printed draft of the proposed scheme may be inspected free of cost on each week day during a period of fifteen days from the first publication of the notice, at the Treasurer's Office, Guy's Hospital, between the hours of eleven A.M. and four P.M., and at the office of the said Commissioners, Whitehall, London, S.W., between the hours of ten A.M. and four P.M. Any objections to the proposed Order, or suggestions for its modification, may be transmitted in writing to the Secretary of the said Commissioners, Whitehall, London, S.W., within twenty-one days next after the first publication of this notice.

"Dated this 22nd day of February, 1884.

"HENRY M. VANE, Secretary."

Working men and those interested in the scanty rights of the poor should bestir themselves. If the objections are not made and duly transmitted to the Secretary of the Charity Commissioners before March 14th, the new departure in Guy's Hospital will soon be an accomplished fact.

We would urge on the profession, especially in the South of London, to raise their voice in this matter, and to forward a memorial to the Commissioners against the scheme. They owe such a protest first to the poor, and then to themselves. The poor overtaken with grave diseases and accidents deserve, and ought to have, accommodation in the hospitals of London without charge. For the ordinary incidence of sickness they may and ought to make provision, and to meet the modest and considerate charges of the medical men about them. But in the veritable calamities of life—its organic or dangerous diseases, and its disabling and impoverishing accidents,—Christianity has hitherto "made a bed for them." No consideration for the poor can be more exquisite than this, and none can so touch their not ungrateful hearts. If Christianity is not degenerating amongst us, it will still insist, as GUY did, on making this provision for those who have just enough to do to meet the inevitable expenses of existence. We trust the clergy of the South of London, too, will help the poor in this matter. Medical charities have no right to cater for those who can pay, and when little payments are exacted by great institutions, officered by doctors of great fame, medical service is lowered in popular estimation, and the profession itself is injured. We urge the profession to organise a protest against this alienation of Guy's Hospital from the benevolent purposes of its founder.

THE consensus of medical opinion and of evidence in reference to the injurious pressure of education, alike in the Board schools and the higher schools, is becoming too serious to be resisted, even by less reasonable Ministers than those now in office. It is due to Mr. MUNDELLA, indeed, as we have already said, to admit that he is alive to the fact both as to teachers and pupils. The evil is not one to be proved—at least, at present—by statistics. The Education Act and the present system are too recent, and the etiology of any breakdown in a child's health is too complicated a fact, to admit of any dogmatic demonstration. But for all that, the medical case against the existing system is becoming so strong that the latter will have to be modified, and that speedily. Amongst those whose contributions to this subject have been most effective we must mention Dr. T. S. CLOUSTON, Mr. TEALE of Leeds, Dr. HUMPHRY of Cambridge, Dr. CRICHTON BROWNE, and Dr. WILLIAMSON of Ventnor. It is by such cases as these gentlemen bring forward, and by their wise arguments from the necessity of a good physical basis for mental operations, that the Education Department is likely to be most impressed. Whether it be so or not, there is no doubt of the influence which is being exerted on the public mind by the evidence of

the effect of school pressure on health. When one practitioner alone can—as Dr. WILLIAMSON does—instance six cases of young teachers suffering from phthisis, it is time to talk about other "Results" than those with which the Code is apt to be associated. Some of the most successful teachers, we are persuaded, would be the first to deplore the physical results with which their educational grants are often associated, and the complicated pressure and drudgery by which they are attained. No doubt Dr. WILLIAMSON'S experience in this direction may be exceptional, and he himself is careful to show that the constitution of the patients, as well as the nature of the system by which teachers are selected, or rather taken at random, are often at fault. Nevertheless, the grinding and exhaustive nature of the work is attested by such cases, which are more or less familiar to all practitioners.

There is a disposition at present to emphasise the bad effects of school pressure on teachers rather than its effects on little children. Dr. WILLIAMSON'S letter to us, with its valuable suggestions, applies chiefly to teachers. We trust that the case of the children will be most seriously considered in this question. They are not able to formulate their own grievances. Their parents are scarcely more able. And yet it is within the experience of every medical practitioner that children give the most frequent indications of exhaustion from school work, and that this work, so far from being a pleasure to them, is a toil, and sometimes a dread. Pallor, fear, faintness, diarrhœa, headache, and even slight epileptic symptoms, are not infrequent phenomena in the children attending Board Schools. When the number of subjects is considered, and the scanty or irregular nourishment of the pupils, together with the temptations to the teacher to apply pressure, the existing system must be pronounced indefensible, and the need for one more pleasant and rational must be admitted.

We would deprecate all hasty theorising on this subject. But can anyone doubt the seriousness of the question, or the effect of long weary hours of school work, followed by hours of home work, often in homes where there is no leisure and little food? The grave physical effects of mental strain, at a later age and under higher social conditions, have been shown by Sir ANDREW CLARK, who has ascertained that 10 per cent. of the young men competing for places in the Indian Civil Service become subjects of albuminuria. We are still in need of minute observations, excluding fallacies, on the health of children of tender years under the less heroic but scarcely less trying conditions of school examinations. But enough is known and seen every week by medical practitioners to prove that schools may make or mar the future of children to an extent which brings them into the front of sanitary influences. The problem for statesmen is to arrange public education so that it shall be a physical as well as an intellectual gain to the nation.

AN "Independent Medical Practitioners' Association" has been started in Calcutta. Amongst the means adopted by it for the promotion of the interests of the profession in India is the issue of a publication containing extracts from newspapers bearing on medical subjects, reports of meetings, &c.

Annotations.

"Ne quid nimis."

NO MEDICAL MAN ON THE ROYAL COMMISSION FOR DWELLINGS.

IT will not fail to be noted as a significant fact that no medical man has been placed on the Royal Commission appointed to investigate the condition of the dwellings of the poor. Mr. George Godwin, the architect, represents the building profession; but it has not been deemed necessary that the profession of medicine, or health-preservation, should be represented, although the prevention of disease is one of the crying needs of the evil to be investigated. We venture to think this may fairly be taken as proof that medicine, as such, is not appreciated in high quarters. The sociologist is right who tells us that the assertion of claims to recognition and respect is always a *personal* matter. A profession is never acknowledged until the individual talents and self-assertion of its members thrust it on public notice and compel its recognition. The legal profession owes its repute to lawyers, the theological profession to divines; and the medical profession can only achieve social distinction by the force of social qualities in the personal characters of its members. Medical men must show themselves statesmen and philanthropists—in short, active members of society—outside and apart from their professional work and status, before they will command the respect and confidence of society. Now, it cannot be disguised that, as men individually, physicians and surgeons are nowhere in society. Their very devotion to science renders them unsociable. They cannot, in the nature of things, come prominently before society in their medical character, and they do not care, or are in some way unable, to make their presence felt in social life simply as gentlemen. This is the difficulty. If there were more among us who could, and would, live and move actively in society, medicine would, by their *indirectly exercised* influence, attain the recognition it deserves, and which—albeit the community urgently needs the aid it alone can render—it will not obtain for many a long year to come, if ever, on its own merits.

SCARLET FEVER AND SCHOOL ATTENDANCE.

THE spread of infectious diseases in connexion with attendance at school, and especially at elementary schools, is steadily attracting attention; and a recent modification of the Education Code has shown official recognition of the danger. In Leeds the subject has been brought under the notice of the Town Council by Dr. Goldie, who reports that scarlet fever has got a strong grasp upon the school-going population, and he fears it has also got deep root in the innermost recesses of most of the public schools. Cases are concealed in houses. Children from infected households continue their attendance at school, until a death reveals the mischief. Then it is found that the sick and healthy have slept together, and that the hitherto healthy, having dressed themselves in the sick chamber in infected clothing, have regularly started off for school, distributing the poison amongst their schoolfellows. This process at times goes on for weeks, and leads to fresh attacks in other households, until at last the source of the evil is discovered by a fatal outbreak in the family of one of the original importers of infection. In one such case Dr. Goldie found a father, mother, and five children occupying one sleeping-room. The children had all had scarlet fever, but Dr. Goldie apparently only knew of it after the death of the second child, who happened to be of the school-going age. He urges the public to assist him in coping with the difficulty by informing him of every case of infectious disease, so that he may

at once take the necessary measures of prevention; and he is evidently willing in all such cases to provide adequate means of disinfection, and, if need be, to remove the sick to hospital. He holds views, however, as to the repayment of some portion, at least, of the expenses incurred in isolation which we do not share. It is quite true that the Public Health Act says an authority "may" recover such expenses, but it is becoming increasingly evident that expenses incurred primarily for the protection of the public should be borne by the community, who secure the benefits which result. Payments by patients or their relatives may well be reserved for those who desire something better than the accommodation actually necessary for such isolation as is required in the interests of the public.

ARSENIC IN PHTHISIS.

AN instructive debate has recently taken place at the Verein für innere Medicin at Berlin (*Deutsche Med. Wochenschrift*, Feb. 21st and 28th) upon the value of arsenic as a remedy for phthisis. According to Buchner the action of arsenic is almost specific in tubercular diseases, and the subject was raised at the Society by Dr. Kempner, who showed that Buchner's views were far too sanguine. Dr. Guttmann stated that the only effect he had observed in phthisical patients submitted to the drug was an increase in weight, but this was not universal. He had not observed it to control the pyrexia nor to check the progress of the pulmonary lesions. In a few cases appetite improved under its use, but in many it markedly diminished, and in some it produced toxic symptoms. Nor did experiments upon phthisical sputa show that arsenic had any specific action in diminishing the power of the tubercular virus. Dr. Fraentzel, after saying that the inhalation treatment of phthisis was of no avail in checking the progress of the disease, and that therefore the tubercular bacillus must be attacked in other ways, said it was improbable that any substance which had no action on the bacillus outside the body would be noxious to it in the organism. He did not believe in the alleged immunity of the so-called "arsenic eaters," and quoted Johne's statement that animals taking or inhaling arsenic still died of tuberculosis. In his own practice at the Charité he had given arsenic in fifty-nine cases of phthisis without any influence in retarding the progress of the disease, and he was often obliged to discontinue it owing to the digestive disturbance it occasioned. Dr. Lublinski, who mentioned that arsenic was used by Dioscorides, dealt with its applicability to three categories of phthisical patients—viz., firstly, those in which there is already evidence of arrest; secondly, those in which there is wide-spread local disease and much constitutional disturbance; and, thirdly, where there is much disease of other organs. He also had found no improvement in any respect from the use of the drug except to increase in body-weight, which was most marked in the first class, but even in them in only five out of nineteen cases. Moreover, he was inclined to attribute this gain in weight quite as much to the improved condition as to diet, &c., under which hospital patients find themselves. He likewise questioned the immunity of "arsenic eaters," and repeated the statement that arsenic has no action on the tubercle bacillus; whilst the ulcerative lesions of mucous membranes which characterise chronic arsenical poisoning were adduced as evidence against the desirability of employing the drug in phthisis. Another speaker, Dr. Karewski, cited a case of lymphadenoma, in which acute tubercular phthisis developed whilst under arsenical treatment. Dr. Thilenius spoke of the value of arsenic as a tonic, and, without claiming for it anti-tubercular virtues, considered that it controlled the hectic of phthisis. Prof. Leyden summed up the debate, and said that after much experience of arsenic in phthisis he had come to the conclusion that it was of no essential value in that disease. Dr. Kempner replied at length, believing that arsenic acted, not as a specific, but by improving the general condition of the patient, so that he was better able to resist the advance of the disease. The greater part of three meetings was given up to this debate, which, as in most therapeutical discussions, serves to illustrate the difficulties that beset us in estimating the value of drugs, and the manner in which conclusions are unconsciously influenced by personal predilections.

INSTRUMENT FOR ACCURATELY MEASURING AND REGISTERING VARIATIONS IN HEARING.

AT the conversazione held by the Cambridge Medical Graduates' Club, at the Marlborough Rooms, Regent-street, on Friday evening, Feb. 29th, Mr. Dalby lent for exhibition an instrument, the accuracy of which many of those present had the opportunity of testing. We subjoin the description which was attached to the instrument. "Professor Hughes invented this instrument to be used with the induction balance as a scale of sound for comparison with it. During the past twelve months I have made use of it for the purpose of measuring variations in hearing power and registering such variations with absolute accuracy. The registration can be made with perfect facility by the patients themselves. The telephone being applied to the ear, the patient can move the sliding coil from left to right until the clock movement can be heard. The point can then be registered in millimetres, which are 200 in all. It is an electrical instrument, and is used in connexion with the telephone. The nature of its construction is as follows. At each end of a wooden bar divided into millimetres a flat wire coil is fixed, and a similar coil is mounted on the bar, capable of being slid from one coil to the other. One of the end coils is much smaller than the other two, in order to shorten the scale. To the middle coil the telephone is attached; the battery (in the circuit of which is a microphone) and clockwork for making and breaking the circuit are in connexion with the two end coils. The wire on the said coils is wound in the reverse direction, so as to produce a neutral point between the coils. The middle coil being slid upon the bar, currents are induced in it relative to its position between the coils, its maximum point being next to the large coil, and its silent position near the small coil. The position of the coil is read off by figures on the scale. The electric currents are of short duration, being produced at the moment of making and breaking the circuit by the clockwork. One cell is sufficient to work the apparatus. It is advisable to put the clockwork at some distance from the sonometer, that the noise from the wheels running may not interfere with the sounds in the telephone."

POST-MORTEM EXAMINATIONS IN HOSPITALS.

ON February 26th an inquest was held at St. Vincent's Hospital, Stephen's-green, Dublin, touching the death of a woman aged twenty-two. It appears that the deceased had suffered from heart disease with complications, and that there was some difference of opinion between the members of the medical staff of the hospital as to the exact nature of the lesions. To decide the question, the physician in charge of the case, Dr. F. J. B. Quinlan, made a post-mortem examination, against, as it is alleged, the expressed refusal of the friends and the mother superior. It is only just to Dr. Quinlan to say that he understood that the refusal was conditional on its not being thought necessary to perform a necropsy, and there can be no doubt that he did consider it to be necessary. Whilst, however, a mis-

understanding is a reasonable excuse, it is not a legal defence. The friends of the deceased were entirely within their right in declining to allow a post-mortem inspection, and we should be the last to advocate an abrogation of their privilege. At the same time we deeply regret that circumstances should ever arise to prevent what, from a scientific standpoint, is a necessity. The coroner, Dr. N. C. Whyte, is reported to have said, "I have no guarantee that science would be advanced one jot by the holding of post-mortem *inquest* by any individual." We would fain believe that he has been misrepresented. A medical man is by virtue of his position thoroughly qualified to "sit as judge and jury" in an inquiry into the causes of death. The information he gathers, and the conclusions he draws, are not for himself alone, but for the guidance of the profession at large, and thus for the benefit of suffering humanity.

HAPPINESS AN AFFAIR OF THE HEART AND STOMACH.

DR. B. W. RICHARDSON is one of those men of genius who flash out scientific truths, as it were, incidentally, as a smith strikes luminous sparks from the iron he is hammering on the anvil. In *The Asclepiad*, treating of felicity as a sanitary research, under the head "Felicity a physiological quality," the author observes: "The centre of the emotion of felicity is not in the brain. The centre is in the vital nervous system, in the great ganglia of the sympathetic, lying not in the cerebro-spinal cavities, but in the cavities of the body itself, near the stomach and in the heart. We know where the glow which indicates felicity is felt, and our poets have ever described it with perfect truthfulness as in the breast. It comes as a fire kindling there. No living being ever felt happy in the head; everybody who has felt felicity has felt it as from within the body. We know, again, where the depression of misery is located; our physicians of all time have defined that, and have named the disease of misery from its local seat. The man who is miserable is a 'hypochondriac'; his affection is seated under the lower ribs. No man ever felt misery in the head. Every man who has felt misery knows that it springs from the body, speaks of it as an exhaustion, a sinking, there. He is broken-hearted; he is failing at the centre of life; he is bent down because of the central failure, and his own shoulders, too heavy to be borne, feel as if oppressed by an added weight or burthen, under which he bends as though all the cares of the world were upon him to bear him down." In other words, felicity is a physical result of a brisk and healthily full circulation of blood through the vessels supplying the ganglia of the great sympathetic system of nerves; and whatever quickens and at the same time frees the flow of blood, in these vessels particularly, engenders the feeling we call happiness. This is the fact, and we believe it explains the action of many articles of food and medicine and medical appliances. It moreover explains and confirms the truth of the maxim which we have so often recommended for general adoption: 'Be briskly, not languidly, joyous if you would be well.' This is the converse of the doctrine that happiness is an affair of the heart and stomach. A comfortable, as contrasted with an austere, mode of life is the most natural, and therefore the healthiest and the best. We sometimes wonder why those who live by rule, and tremble as they live, labouring to eat and drink precisely what is "good for them," and nothing else, are so weakly and miserable. The cause of failure is that such persons are over-careful; life is a burthen to them. They have no "go" in their mode of existence. One-half of the "dyspeptics" we see, and whose sufferings we are asked to relieve, would be *well* if they were only *happy*. Everything in life and nature acts and reacts in a circle. Be happy and your sympathetic ganglia will have the blood coursing through them with the bound of health; and this quickening of the pulse, if it be produced by "good cheer," whether at the table or on the mountain side, will, in its turn, produce happiness. Felicity is the outcome of a physical state, and that state is itself enhanced by the sort of cheerfulness which often consists in being happy in spite of circumstances. Charles Dickens was in his way a philosopher, and he exemplified the truth now expounded by scientists in the limning of that incomparable character Mark Tapley.

HOSPITAL FOR INFECTIOUS DISEASES, BIRMINGHAM.

AT a meeting of the Town Council, held on the 4th inst., the Health Committee proposed the extension of the Borough Hospital for Infectious Diseases, at an estimated cost of £28,500. Some considerable discussion took place upon the plans prepared by the Health Committee, as also upon the expense connected with the scheme, which, it was shown, would involve a cost to the town of £7000 a year. This is not so much matter for regret if it can be shown to be desirable in the interests of the community that protection should be given to the healthy, and care taken of the sick during the scourges of small-pox and scarlet fever. At a meeting, however, of about half the total number of the Council the proposal was carried by only one vote. It was pointed out that the approval of the Local Government Board had not been obtained or their advice asked. In view of the accumulated amount of experience possessed by the advisers of this department of the Government, the Town Council of Birmingham would do well to consult the central authority; the ratepayers, too, have a right to demand that such a course should be pursued, and every advantage taken of the knowledge of others towards perfecting the scheme and economising the expenditure. Local bodies often know best their own requirements, but are not always in a position to carry them out, nor can they afford to neglect the lessons which the formation of similar institutions has taught.

RABIES.

TO deal in anything like an adequate manner with the latest statements of M. Pasteur, anent canine madness, would require much more space than we have for the question at the present juncture. We simply propose to give in a few propositions the substance of Pasteur's recent communication to the Académie de Médecine. It is asserted that the spinal cord is affected before the medulla oblongata; that the virus is also contained in the nerves of the body and the salivary glands. The virus is said to retain its activity in the brain and spinal cord of dogs dead of the disease, but prevented from undergoing putrefaction by means of cold. The poison is found to exist, though not constantly, in the cerebro-spinal fluid. Attempts to cultivate and isolate the virus have hitherto been in vain. It has been determined that the employment of minute doses of the poison for inoculation may prolong the duration of the stage of incubation; further, the dilution may be pushed to such an extent that inoculation may be made without effect. When the quantity of virus inoculated is large and the incubation short, the rabies assumes the ordinary paralytic form; when the quantity injected is less and the period of incubation longer, the "forme furieuse" is provoked. Inoculation of small quantities does not confer immunity. M. Pasteur has observed in the rabbit, as in the dog, but only exceptionally, a remission of the first symptoms, followed by relapse and death. This remission frequently happened in fowls. All experiments made in order to test the hypothesis of a possible attenuation of

virus by cold and by the alleged passage of the poison to the fœtus have led to negative results. The virus is absorbed through the sanguiniferous system. The passage of the *materies morbi* through many species of animals brings about a modification of it; this modification may be made stable by transmission through each species of animal, but its virulence probably differs for each kind. M. Pasteur believes that he has conferred immunity in dogs from this disease by the employment of a modified virus, and he hopes that this immunity may some day be enjoyed by the human species.

THE BATTLE OF TEB.

THE information which has reached us respecting the arrangements for the care of the wounded in the hard-fought action of Feb. 29th, meagre though it be, is very satisfactory. When the troops advanced from Trinkitat no other transport was taken but the mules with the reserve ammunition, gun ammunition, and hospital equipments. After the action tents and every necessary appliance for the wounded were supplied from the base; and arrangements were made by Admiral Hewett for conveying the wounded across the lagoon and taking them on board the *Orontes*, with the view, we presume, to their being removed at once to Suakim. *The Times'* correspondent says: "The work of conveying the wounded was admirably done; and their conveyance across the morass, which was especially difficult, reflects great credit on the officers and men of the Army Hospital Corps." The medical officers are stated in Reuter's telegrams to have "behaved nobly." Their hands must have been pretty full, for, in addition to thirty-two killed, the number wounded is reported as 142. *The Times'* correspondent, after describing the admirable manner in which the troops behaved throughout, says: "With so many instances of individual gallantry it would be invidious to particularise, but the noble manner in which the chaplains and medical corps did their work deserves record. The first man hit was in the Gordon Highlanders, while under a very severe fire, but in a moment Dr. Lewis was attending him coolly and carefully as though in hospital." General Baker and Colonel Burnaby also appear to have been immediately attended to, for, though severely wounded, they were then enabled to continue their work till the end of the day. Brigade Surgeon M'Dowell, the principal medical officer with the Force, and therefore responsible for all the arrangements, is described as being "everywhere." We trust that the work begun thus favourably may continue to do credit to the Department, and that the medical officers may be as successful in the important duty of maintaining the troops in health as they have been in affording prompt and efficient assistance under circumstances of so much danger and difficulty. The health of the troops is reported to be excellent, and the wounded to be doing well. In the march from Teb to Tokar, a distance of about eleven miles, under a burning sun, only one man is reported to have fallen out, and he ultimately rejoined the ranks.

A CHEMICAL LUNG.

THE proceedings at the Parkes Museum last week were of a very interesting nature. With Dr. B. W. Richardson in the chair, the audience had the pleasure of hearing two addresses; one from Dr. Bartlett on the impurities of the atmosphere in dwellings, more especially those devoted to the use of the sick; the other from Dr. Richard Neale, on the subject of his well-known "chemical lung." Dr. Bartlett first spoke of the different kinds of impurities, and of their effects on living beings. His main contention was that so-called disinfectants were utterly incapable of destroying "disease germs" without inflicting destruction on human or other beings exposed to the action of the disinfectant. It is needless for us to detail the nature of the process by which Dr. Richard Neale proposes to purify the vitiated atmosphere of our places of assembly, sick wards, underground railways, tunnels, and the like (see THE LANCET, vol. ii. 1880, pp. 301 and 359). Suffice it to say that Dr. Neale gave a most practical and lucid exposition of the simple chemical nature and mechanical apparatus by which such desirable results can be effected. Two punkahs were shown at work at the meeting in question, one kept in action by hand, the other constructed by Messrs. Krohne and Sesemann to go for two hours automatically. We should like to hear that these punkahs were being extensively tried in sick rooms and hospital wards. The reduction of highly unstable, injurious floating organic particles to a less stable, innocuous, and fixed matter which they would effect would be of great value in purifying the air of such places. In fact, their use would afford a practical refutation of the objection implied in Dr. Bartlett's contention that efficient disinfectants cannot be used without risk to the patient.

EVIDENCE FOR THE COMMISSION ON THE HOUSING OF THE POOR.

THE Royal Commission on the housing of the poor will find no lack of evidence forthcoming as to the actual grievances, though the suggestions of practical remedies will not be so plentiful. To our readers the question has long been familiar. We have described in these columns the worst districts of London, and we have also pointed out those quarters which, like whited sepulchres, wore a good external appearance, but were all corruption within. In our issue of October 30th, 1875, we alluded to the spread of fever by tailors living in Soho and working for the best West-end firms. This was followed up by a Special Commission Report on the Home Work and Sweating System, published on Jan. 29th, 1876, in which we described the Golden-square and Poland-street neighbourhood, which has been so ably denounced within the last few months by the *Pall Mall Gazette*, and gave many instances of fever raging in crowded homes where work was being done in tailoring, dressmaking, &c. On the 18th of August, 1877, our report on the Spread of Disease through Laundries gave another picture of the homes of the poor at Blackfriars, Kensal New Town, Peckham, Bedfordbury, and various similar districts. Again, on February 9th, 1878, our report on the Contamination of Uniforms provided by the Army Clothing Depôt took our Commissioner to the homes of the poor workers where cases of infectious disease had occurred, and this led to many startling revelations, notably with regard to the sanitary condition of the houses in Pulford-street, Pimlico. The report on the Distress in London, published March 15th, 1879, was still more to the point, for it contained details concerning the actual starvation witnessed in the overcrowded homes of the East-end and West Central districts. This report caused so much sensation at the time that some liberal subscriptions were sent to the office of this journal to enable our Commissioner to relieve the distress he had witnessed and depicted. On October 18th, 1879, we attacked a new phase of the subject by reporting on the overcrowding, filth, and bad drainage of the Italian quarter at Saffron-hill, where we found four different families living in one room! Finally, in the first week of August, 1883, in our report on Probable Cholera Centres, we forestalled the "Bitter Cry of Outcast London" by denouncing the vile dens into which the extreme poor were huddled together. A large number of the worst rookeries of London were passed in review, and in many instances minutely described. The brighter side of the question has also been dealt with in this journal, and in a

series of Reports on the Dwellings of the Poor the various improved block buildings have been freely criticised—e. g., the Victoria Dwellings, Battersea, in our issue of July 14th, 1877. Altogether, therefore, it cannot be said that the question stands in want of elucidation. Indeed, more would have been done but for the very strong interests that are opposed to reform. What our legislators most need is, not information, but the courage to act upon the information given.

THE CAUSE OF TYPHOID AT LIEGE.

DURING the course of the past year the town of Liège, in Belgium, has suffered from an epidemic of typhoid fever which has exceeded in virulence any outbreak during the fifty years. Of the garrison of 2740 soldiers, 189 contracted the fever in the course of three months, and the proportion of deaths was equal to 13·20 per cent. Nor was the epidemic restricted to the barracks; it also attacked the civil population in various quarters of the town, and, after creating the greatest distress, suddenly abated. A lengthy inquiry as to the causes of the outbreak has been instituted by Dr. H. Journez, and the facts elicited are of a fairly conclusive character. From the first the water-supply of the town was carefully watched and constantly analysed, and no fault found. On the other hand, the sewers were overcharged by the preceding heavy rains, which had caused the waters of the Meuse to rise much above their ordinary level. Some of the low-lying sewers were consequently emptied with difficulty, and in fact often overflowed through the gulleys into the street. To prevent this the openings were stopped up with plugs of straw and clay. The sewer gases forced back by the rising waters of the river were now unable to escape into the street, and the appearance of typhoid fever followed upon these incidents. The barracks and the houses where the cases occurred were precisely those most exposed to the incursions of sewer gas caused by the defective working of the sewers. In other districts, however, and among such establishments as the school of the Filles de la Croix, where there are 130 pupils, the refuge where some 120 paupers find shelter, the prison of the Rue du Nord, and the gendarmerie of the Faubourg St. Leonard, no case of typhoid fever was noticed; but then the sewers in these quarters were not disturbed by the rising waters of the Meuse. Of course other defects assisted to spread the epidemic, but the above facts suffice to establish the principal cause in so decisive a manner as to deprive the local authorities of all excuse for hesitation. The sewer outfall must evidently be protected from the overflow of the Meuse. On the Continent this experience will be of considerable use in helping to demonstrate the dangers resulting from the escape of sewer gas, which as yet are insufficiently appreciated by the majority of those concerned.

A NEW MEDIUM OF SCARLET FEVER.

THE medical world in Islington was much startled last week by alleged discoveries on the part of the master and guardians of the schools of the Islington Workhouse. One of these purported to be a discovery in medical science and the other in medical ethics. According to the former, and chiefly on the strength of certain observations of the master, tinned meat from Australia produced scarlet fever, and that in the course of a few hours. The new doctrine in medical ethics must be credited to the guardians themselves, who decided that it would be right to send the scarlet-fever-giving meat on to the workhouse for consumption there! A more remarkable proceeding was surely never conceived. If the guardians really thought that the meat was charged with such powers, their business was to have it burned with as little delay as possible. The master fortified his new discovery by alleging the concurrence of the late and excellent medical officer, Mr. Cowen. But Mr. Cowen has since, as might have been expected, entirely disclaimed concurrence in such unfounded and absurd nonsense. The persistence of scarlet fever in the schools is a discredit to the administration, and ought immediately to be elucidated. But the guardians will do well to seek the solution of the problem at other hands than those of the master of the schools.

"THE ANALECTIC."

The Analectic is an American publication planned to meet the increasing requirement, on the part of the profession, for frequent analysis and classification of the immense number of items of practical import to be found scattered throughout the mass of current medical literature. This literature, in the English language alone, has become so voluminous that the class of practitioners who most desire to avail themselves of the essentials of medical progress are those who have the least time at their disposal to devote to the amount of reading necessarily involved in accomplishing such a purpose. These are the principal reasons for the appearance of *The Analectic*. As the periodical has come out it would be idle on our part to enter into an elaborate argument as to whether the wealth of medical literature is not already too great. *The Analectic* is to be a "monthly periscopic summary of the progress of medical science." Its matter is tabulated under the following heads:—Zymotic, Neurotic, Respiratory, Circulatory, Alimentary, Uro-genital, Venereal, Ophthalmic, Aural, Dermal, Toxic and Hygienic, Parturient, Gynæcic, Pediatric, Surgical, Miscellanea, and New Books. One recommendation the journal certainly has in the brevity of its abstracts. The publication must, no doubt, take its chance with the rest of periodical literature; and its success or otherwise will prove its *raison d'être*.

DEATH FROM CHLORAL.

AN inquest was held at the Gloucester Infirmary on Feb. 26th and 27th, on the body of Annie Frost, a married woman, aged thirty-seven, who died in the Infirmary from the effects of an overdose of chloral. The physician to the case, Dr. Washbourn, prescribed a drachm of syrup of chloral hydrate as a nightly hypnotic. Mr. Ancrum, a pupil at the institution, who took down the prescription from dictation, rendered it "one drachm of chloral hydrate," a dose six times the strength of that intended to be given. The draught was made up by the dispenser, a qualified pharmacist, and administered by the nurse. Two questions were presented to the jury for their consideration. Who was responsible for the mistake, and what was the degree of responsibility? The nurse was acting under orders, and her duty ended with the giving of the draught in accordance with clearly written instructions. Although legally no blame could be attached to the dispenser, it is to be regretted that in the exercise of his discretion he did not call the attention of the medical officer to the largeness of the dose. His knowledge of doses would naturally lead him to the conclusion that it was, to say the least, not customary for a physician to order sixty grains of chloral to be taken night after night. Unfortunately the dose, although a very large one, was not in excess of the maximum given in certain cases to secure sleep—e.g., in delirium tremens. Mr. Ancrum did not hear the word "syrup," and not being well versed in the properties of chloral, it did not occur to him that there was anything unusual, much less dangerous, in the dose he was prescribing. We have it on the testimony of Dr. Washbourn and the resident medical officer that the former gentleman distinctly stated "syrup of chloral hydrate." This may well be the fact. Everyone who has

experience of correcting manuscript written by an amanuensis must be familiar with the frequent and curious mistakes that are made. Criminal negligence was out of the question, as this implies intent to do harm. Was there gross and culpable negligence? We are certainly of opinion that there was not. The verdict of the jury, "Death by misadventure," was, to our mind, the only one that could be found in accordance with the evidence. Such cases as the above show how scrupulously careful one ought to be when dealing with drugs of a poisonous nature. Instructions should be given to every hospital dispenser to examine all prescriptions and to report immediately on such as appear open to doubt. We sincerely sympathise with the friends of the deceased and with the infirmary officials concerned in the case.

OSMIC ACID AS A REMEDY FOR NEURALGIA.

EULENBURG contributes a short paper to the *Berlin. Klin. Wochenschrift* of Feb. 18th, detailing his experience of osmic acid injections (a 1 per cent. aqueous solution in five-minim doses) for the relief of neuralgia, a method which has been carried out by Billroth in sciatica, and by Neuber in Esmarch's clinic at Kiel in two cases of sciatica and one of trigeminal neuralgia. Eulenburg alludes to the effect produced by this powerful agent in goitre, mentioning two cases in which pressure signs were marked, and were relieved by the shrinking of the tumour following the injections. The most striking fact is that, powerful poison and irritant as it is, it leads to no local or general disturbance whatever. But it cannot be said that the results he obtained in neuralgia are very encouraging, especially when the liability to recurrence of attacks is considered. Thus, of twelve cases, including sciatic, brachial, and facial neuralgia, so treated, three, all of them recent and acute cases, probably neuritic, were cured; in five there was improvement, and in five no good effect was produced. The number of injections varied in each case from three to fourteen, the treatment extending over one to six weeks; and in each case the injection was made beneath the skin over the seat of most intense pain, with the view of obtaining a direct local action by diffusion of the osmic acid to the perineurium. Eulenberg points out that precautions should be taken to keep the solution in the dark to prevent the blackening which it so rapidly undergoes on exposure; and for this reason also it is well to frequently prepare the solutions afresh. In a few cases, where the injected fluid escaped on the surface, some blackening of the skin was produced, but this soon disappeared.

CAUSELESS VERDICTS IN INQUEST CASES.

IT is now nearly ten years since the Births and Deaths Registration Act of 1874 imposed upon coroners the duty of giving in inquest cases a certificate of "information concerning the death, and specifying the finding of the jury with respect to the said particulars (required to be registered concerning the death) and to the cause of death." Since this Act came into operation on January 1st, 1875, the death register is in all inquest cases entirely dependent upon these coroners' certificates for all the particulars required to be registered concerning such deaths, and it becomes therefore important from a legal, statistical, and public health point of view that coroners should fully recognise the necessity for strictly carrying out this provision of the above-mentioned Act. While, however, there is every reason to believe that the cause of death in inquest cases is now more intelligently returned than it was twenty or even ten years ago, it is also true that the national death register still suffers much detriment from the causelessness of a large proportion of the findings of juries at inquests, for which coroners are strictly responsible. In the city of Norwich, for instance, 29, or 7·2 per cent., of the 405 deaths registered during the last three months of 1883 were inquest cases, and the death register was, therefore, in respect of those deaths dependent upon the information given in the coroners' certificates. It is a fact, however, that in twenty of those twenty-nine cases the finding of the jury was simply "Natural causes," which words do not give the slightest clue to the "cause of death," which the Act specifies as one of the particulars required to be registered. It seems obvious that it could not have been the intention of the Act that the death register should receive worse information as regards the cause of death in inquest cases than it does in cases in which no inquests are held. There is, however, no doubt that if no inquests had been held in the twenty cases above referred to the cause of death would, in many cases, have been duly described and certified. It therefore becomes important to inquire by what means this serious deficiency of the Norwich death register, for instance, may in future be obviated. The coroner is undoubtedly responsible for the finding of the jury, but who is to persuade the coroner for Norwich that the words "natural causes" do not supply the necessary information regarding the cause of death "required to be registered"? Is it the Registrar-General, or the President of the Local Government Board, or the Home Secretary, or the Lord Chief Justice, who should bring pressure to bear upon coroners who persist in certifying "causeless verdicts" in inquest cases?

THE TRANSACTIONS OF THE GERMAN BOARD OF HEALTH.

THE long-expected second volume of the Transactions of the German Imperial Board of Health, edited by the Director, Dr. Struck, has just been published. It contains the following important articles:—1. The Etiology of Tuberculosis, by Dr. R. Koch. 2. On the Influence of Age and Sex on the Mortality from Pulmonary Phthisis, by Dr. A. Würzburg. 3. On Tubercle Bacilli in the Sputum, by Dr. Gaffky. 4. On the Disinfection of Phthisical Expectoration, by Drs. Ernst Scholl and Bernard Fischer. 5. Experimental Studies on Artificial Attenuation of Anthrax Bacilli and Anthrax Infection, by Drs. Gaffky and Lœffler. 6. On the Quantitative Estimation of Micro-organisms in the Atmosphere, by Dr. Hesse. 7. On the Entrance of Fungus Spores into the Respiratory Passages, and the Lung Diseases thereby caused, by Prof. Dr. Schütz. 8. On Disinfection by Chlorine and Bromine, by Dr. B. Fischer and Bernard Proskauer. 9. Researches on the Fermentation of Milk, by Dr. F. Hueppe. 10. On the Etiology of Abdominal Typhus, by Dr. Gaffky. 11. Researches on the Micro-organisms of Diphtheria in Man, in the Pigeon, and in the Calf, by Dr. Lœffler.

DIPHTHERIA AND DAMPNESS OF SOIL.

DR. WOODFORDE, whose annual reports are always interesting, has evidently given considerable attention to the subject of diphtheria in the Berkshire combined sanitary district. His results do not differ from those which others have arrived at, but his confirmation of views previously expressed is by no means unimportant. In one part of his last annual report he explains that a return which he has prepared as to the prevalence of diphtheria, amongst other diseases, in the several urban and rural populations under his charge, shows that a greater preponderance of deaths takes place on the clays of the Woolwich and Reading beds, as compared with those occurring on the chalk, notwithstanding that the latter formation is so greatly in excess in point of area. The Newbury urban district happens to lie partly on both formations; but in a comparatively crowded town it

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was found that any attempt to show definite relation between the number of attacks and the geological circumstances was frustrated by the many sources of error which crept in. It is not explained what proportion of the population live respectively on the two different soils; but it is stated that only one death occurred from the group of diseases, including diphtheria, scarlet fever, and croup, amongst persons living on the chalk; the mortality, which in all amounted to thirty-two, being practically limited to the alluvial and clayey parts of the district. As a rule, the deaths appear to have occurred in damp localities, and in houses situated at a low level, and having defective means of drainage. At Winterbourne, at Bradley Court, at Chieveley, and other places, outbreaks of diphtheria and allied attacks of sore-throat also came under observation, and it is stated that the sanitary condition of the cottages was either fairly good or even very good, but that in each case the dwellings stood on a damp, low site, and generally on a clay soil. Whatever doubt there may be as to the cause of diphtheria, whether as to its origin or its spread, one thing seems abundantly proved, and that is that adequate subsoil drainage is indicated as one of the measures of prevention wherever this is practicable.

THE FEVER HOSPITAL AT WINCHMORE-HILL.

IN the House of Commons on the 29th ult., Lord G. Hamilton called attention to the conduct of the Local Government Board in placing a permanent fever hospital at Winchmore-hill, without giving an opportunity to the local authorities, who had written to the Local Government Board on the subject, of stating their objections to the hospital. Lord G. Hamilton rightly condemned the action of the Local Government Board in refusing the interview, and urged that the course adopted by the Board was calculated to establish a dangerous precedent for the exercise of that controlling power over local boards entrusted by Parliament to that department. Mr. G. Russell said that the Metropolitan Asylums Board had decided upon the site, that all the Local Government Board had had to do was to weigh the propositions of one representative body against those of another similar representative body, and that the objections had been critically examined. Sir C. Dilke admitted that he thought it would have been well had a paragraph, stating that the representations of the local Board had received full consideration, been inserted in the letter from the central Board.

TWO NEW "SPECIAL" JOURNALS.

WE understand that Dr. Felix Semon has consented to undertake the management of a new monthly journal to be published in the German language, and called the *Internationales Centralblatt für Laryngologie, Rhinologie, und Verwandte Wissenschaften*. In a preliminary note which Dr. Semon has circulated he states that no "original communications" will be admitted into the journal, which will consist wholly of reports on original papers published elsewhere, reviews, occasional editorial articles, and short miscellaneous paragraphs. Dr. Semon asserts that to publish original communications in a "special" journal is opposed to the true interest of the specialty, as entailing great labour upon those who desire to keep up with current literature, and hindering the wide circulation desirable for valuable "special" articles. Dr. Semon has secured the assistance of many well-known laryngologists in Europe and America; and his project has already met with so much support that the first number of the journal will be issued in July. If its promise is realised, it will be a necessary work of reference for all those who are interested in this department of knowledge, while it will be of great service to the general physician and surgeon, as he will find in it, in a small compass, a record of everything of importance that has been done in this specialty. While writing this there lies before us the first number of a new Italian periodical, entirely devoted to orthopædic surgery, entitled *Archivio di Ortopedia*, and published at Milan. It contains four original articles, all by Italians, and twenty-one reviews, which have a more international range.

SUPPOSED ATTEMPT TO POISON.

AT the Knutsford Petty Session on Feb. 29th the Justices had before them the case of Margaret Wilkinson, aged forty-four, who was brought up on remand on a charge of having attempted to poison her son and daughter-in-law by administering oxalic acid. Whatever may be the final result of the investigation, two facts appear to have been established—1st, that by some means a quantity of oxalic acid found its way into a kettle of water used by Mary Louisa Burgess (the daughter) for making the breakfast tea; and 2adly, that the accused had insured the life of her son without his knowledge on Dec. 17th, 1883. Mr. Carter Bell, the county analyst, found that oxalic acid was present in the water in the proportion of half a drachm to a pint, or in such degree of dilution that the quantity of tea ordinarily taken at a repast would not contain a fatal dose for an adult. This, however, would not extenuate the offence if the *intent* were proved. The statement of the woman Burgess that the tea when made looked milky, like chalk and water, and that it had an unpleasant sickly odour, requires explanation. Oxalic acid would at the most only cause a slight turbidity from precipitation of calcium oxalate.

THE DALRYMPLE HOME FOR INEBRIATES.

WE have been favoured with a proof of the report for thirteen weeks of this institution. There have been 17 admissions, 9 under the Act and 8 privately. Of those under the Act, 4 entered for twelve months, 1 for nine, and 4 for three. Those who had to leave at the end of three months expressed their regret at having to do so, and all the patients have signed a statement to Dr. Smith expressive of their satisfaction with the kindness and firmness with which he has preserved the discipline of the establishment, and of the way in which their comfort and well-being have been promoted. Dr. Smith receives letters daily from applicants for admission, whom he cannot receive till vacancies occur. Stimulants are cut off in all cases at once, and with the happiest results. We perceive that, at a recent meeting of the British Medical Temperance Association, a resolution was passed expressing the opinion that the rules for the admission of inebriates under the Habitual Drunkards Act should be made less stringent in the case of voluntary patients.

DIASTATIC FERMENT OF BACTERIA.

RECENT investigations have conclusively established the universal occurrence of diastatic ferments in different parts of plants, and have thrown a new light on the processes of nutrition and fermentation. Wortmann has been occupied during the past three years with the question as to what action common bacteria might have on starch. As Baranetzky has shown, the starch granules of different kinds are acted upon with very unequal rapidity by the diastatic ferments of plant juices, the strongest ferment of all—malt diastase—being well known to have no perceptible influence, even after long exposure, on solid potato-starch granules, whilst wheat and buckwheat are dissolved with facility. The results of Wortmann's researches may be thus briefly stated:—Bacteria are capable of acting on starch, whether in the solid state as paste or in solution, in a manner analogous to diastase. As in the case of diastase,

different kinds of starch are attacked by bacteria with different degrees of rapidity. The action of bacteria on starch is manifested only in the absence of other sources of carbohydrates and when access of air is not prevented. The action of bacteria on starch is effected by a ferment secreted by them, and which, like diastase, is soluble in water but precipitable by alcohol. This ferment acts precisely as diastase in changing starch into a sugar capable of reducing cupric oxide, but is not possessed of peptonising properties. The ferment itself is also capable of acting on starch in the absence of oxygen. The ferment is secreted by the bacteria also in neutral solution of starch, and exerts its influence under these conditions, which influence is expedited, however, in slightly acid solutions. The author concludes his paper with speculations as to the conditions under which bacteria are capable of generating this amylolytic agent instead of the ordinary peptonising one.

KLEPTOMANIA EXTRAORDINARY.

WE do not deny that what some writers call "moral insanity" may, under certain exceptional circumstances, seem to be *catching*. It is beyond question that a morbid but energetic mind may influence a weaker one; but we very much question the story which comes from Paris of kleptomania occurring simultaneously, or propagated with extraordinary rapidity from one mind to another, in a case in which husband and wife, one aged sixty-seven and the other sixty-three, combined or conspired to steal objects of trifling value at the Magazin du Louvre. This is kleptomania extraordinary indeed; and we venture to think it is not a form of the disease which ought to find scientific recognition. It is directly opposed to the "dissolution" theory of Herbert Spencer, which is the only intelligible hypothesis of pathology in this malady. If anything were needed to reduce the presumption of insanity and defence of "irresponsibility" to absurdity, the diagnosis of insanity in such a case as that which escaped justice in the criminal court of Paris on Monday last would complete the logical process.

A NEW TEST FOR ATROPINE.

HITHERTO no reliable chemical test appears to have been found for atropine. Mr. Gerrard, F.C.S, believes that the following procedure constitutes a test for atropine and other members of the mydriatic alkaloids—hyoscyamine, daturine, duboisine, and homatropine. To a small portion of atropine in a test tube add about 2 c.c. of a 5 per cent. solution of mercuric chloride in 50 per cent. of alcohol, and warm gently. The precipitate will at once appear, and become brick-red in colour. Like most alkaloidal reactions, Mr. Gerrard finds there are certain conditions necessary for the success of the test. It does not answer in dilute solutions, neither does it turn out well if atropine be added to the mercury. Other alkaloids give for the most part a white precipitate. The brick-red precipitate is the characteristic feature, and appears to be chiefly composed of mercuric oxide.

PIGEON-SHOOTING FROM TRAPS.

A CONTEMPORARY observes that "pigeon-shooting cannot be described as a noble sport." We quite agree with the remark. It cannot be described as sport at all. Wholly apart from the incidental, or as some would say accidental, cruelty commonly practised in connexion with pigeon shooting from traps, the feat of hitting tame pigeons as they escape from a trap is a very poor one. As all who excel in these exploits know perfectly well, it is a trick having very little in common with shooting partridges, or even pheasants, except perhaps the tame fowl of that ilk, which are fed from the hand up to the day before they are shot, or brought down in hampers and turned out on the spot. We wonder, not that true and keen sportsmen are found supporting the proposal to put down tame-pigeon shooting by law, but that anyone who knows what sport really is should be found to defend the adoption of such a silly excuse for gambling as this pigeon-shooting supplies.

OVERHEAD TELEGRAPH WIRES.

THE *Globe* says: "On inquiring at the General Post-office we learn that nothing is there known as to any proposed conference between the Postmaster-General and other Government Departments with the private telegraph companies, for the purpose of discussing the advisability of introducing a Bill giving powers of control over the wires to local authorities." If this be so, it is much to be regretted; and looking to the manifest interest which Mr. Fawcett has in his department, we can scarcely bring ourselves to think he has not taken, or is not preparing to take, steps in the matter. The evidence of an ever-present danger is overwhelming. The subject must surely be "under consideration." Perhaps the *Globe* is not as well informed on this point as on many others.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

DURING the last month there has been held a special series of weekly meetings of this Society for the discussion of the Pathology and Clinical Significance of Albuminuria. The previous meetings have been largely attended, and addresses have been delivered by a number of prominent members of the profession. The discussion will be brought to a close on the evening of Tuesday, the 11th inst., in the Faculty Hall, at eight o'clock. All medical men are invited to be present.

ALLEGED DEATH FROM SCHOOL PRESSURE.

THE inquest on Elizabeth Emma Rowley, aged eight, of Cheltenham, shows that death resulted from meniogitis. This disease, of course, was not of infrequent occurrence before the days of Board Schools. But it is impossible not to regret that in this instance the school work was not abandoned or relaxed. The parents should have informed the teachers of the child's complaints. We agree with the medical men of Bradford that home lessons should not be imposed on children under ten.

SIR WILLIAM HEWETT, K.C.B., AND SIR GERALD GRAHAM.

IT is an interesting and noteworthy fact that both the Commanders in the Soudan are sons of medical men. Sir William Hewett is the son of the late Mr. W. W. Hewett, who practised at Brighton, and Sir Gerald Graham is the son of Dr. Graham, of Eden Brows, Cumberland.

THE ILLNESS OF DR. C. THEODORE WILLIAMS.

SINCE our last report the signs of peritonitis, with distressing symptoms, have subsided, and during the last week the temperature has fallen to normal, and the pulse to 80. Nourishment is better tolerated, and the nights are not disturbed. There seems, therefore, a fair prospect of gradual recovery from this severe and dangerous illness.

THE Government of Victoria are about to appoint a Board to inquire into the condition and management of the various lunatic asylums in the colony. A similar inquiry is being conducted in Tasmania.

THE Ashton Board of Guardians have rejected a motion which had for its ulterior object the appointment of a resident junior medical officer for the workhouse. The infirmary contains some 300 patients, and even the leading opponent to the appointment of a resident officer admitted that two-thirds of this number were actually under medical treatment, the remainder being the old and infirm, &c. This would leave over 200 patients needing the personal supervision of a medical officer, and no one would for a moment contend that in any ordinary hospital such a number of sick people should be without the services of a resident medical officer. We fail to see why the sick poor should, in this respect, receive different treatment in a workhouse from that which they would receive in any other similar institution.

DIPHTHERIA has been, it is stated, epidemic, in a greater or lesser degree, in Odessa for the last twelve years. At an extraordinary general meeting of the city authorities and representatives recently held for the adoption of special measures in order to arrest or minimise the alarming mortality from the disease, it was decided to establish diphtheria hospitals on the system of sanitary hotels, where relatives of patients will be accommodated at moderate charges, and to inaugurate a thorough system of medical inspection and disinfection of the poorer class of houses.

WE notice that the gentlemen who have gained the first place in the last two examinations for the Indian Medical Service have come from the same metropolitan medical school; the one successful in August last fully maintained his position at Netley; and the gentleman who was placed first in February obtained over 400 marks more than the second candidate.

THE prospectus has been issued of a Society for the enforcement of Sanitary Laws, which, whilst recognising that the existing enactments, if properly carried out, are capable of removing many of the evils affecting public health, yet considers there is room for the action of an auxiliary agency to diffuse information, and otherwise to assist in promoting sanitation.

DOUBLE ovariotomy, with removal of the uterus, under strict antiseptic conditions, was performed by Dr. W. H. Goode at the Prince Alfred Hospital, Sydney, on Dec. 28th last. The drainage-tube was employed. The incision, which was less than five inches in length, had firmly united by the thirteenth day after operation.

IT has been decided by the subscribers to the Shuter Memorial Fund that the money forthcoming be expended in the purchase and erection of a memorial tablet in the chapel of the hospital and in the purchase of books for the library. The books will be kept together in one collection, which will be called the Shuter Memorial Library.

WE understand that a series of conferences is being organised in connexion with the forthcoming National Health Exhibition; at one of which, under the auspices of the Medical Society of London, the question of the effect of present systems of education upon the national health will be discussed.

MR. AYERST HENHAM HOOKER, whose heroic service during the recent epidemic of cholera in Egypt was rewarded by the Queen's gold medal and the order of the Medjidieh of Egypt, has just been appointed Sanitary Inspector for Lower Egypt. The appointment augurs well for the future of the country.

LAST Tuesday's *Gazette* contains the official announcement that the Prince of Wales, Cardinal Manning, the Marquis of Salisbury, Earl Brownlow, Lord Carrington, Sir C. Dilke, M.P., Mr. Goschen, M.P., Sir R. Cross, M.P., the Bishop of Bedford, the Hon. Lyulph Stanley, M.P., Mr. Torrens, M.P., Mr. Broadhurst, M.P., Mr. Collings, M.P., Mr. S. Morley, M.P., and Mr. George Godwin are appointed by Her Majesty Commissioners to inquire into the housing of the working classes, with the usual power to send for and examine persons, papers, and records. Five to form a quorum. Sir Charles Dilke is appointed chairman, and Mr. J. E. C. Bodley secretary of the Commission. The first meeting of the Commission was held on Thursday, all the members being present.

ACCORDING to the report of the medical officer, presented on Feb. 25th, the mortality of Wednesbury has increased during the last few weeks "by leaps and bounds." The death-rate was 31·4 per 1000, and had equalled the births. Scarlet fever and pulmonary diseases appear to be the sources of the evil, aggravated by overcrowding and bad housing of the poor.

A COMMITTEE is being formed in New York to promote a testimonial to the late Dr. Marion Sims. The subscriptions already announced amount to a handsome sum.

THE NEW MEDICAL BILL.

THE Medical Act Amendment Bill of the Government was introduced into the House of Lords by Lord Carlingford on Monday evening, and, with creditable despatch, read a second time on Thursday evening. The committee is fixed for a fortnight hence. We have not time to notice it particularly this week, further than to say that the Bill is almost identical with the measure which passed through the Lords last year. We need only notice one change, and that is in the constitution of the Medical Board for Scotland, which it is proposed to constitute as follows: Three members to be chosen by the University of Edinburgh, two by the University of Glasgow, two by the University of Aberdeen, one by the University of St. Andrews, two by the College of Physicians of Edinburgh, one by the College of Surgeons of Edinburgh acting as a separate elective body, one by the Faculty of Glasgow, and one by the College of Surgeons of Edinburgh and by the Faculty of Glasgow acting *collectively*. We have only space now to express our satisfaction that the Government has, by thus early introducing the Bill, shown its earnestness in wishing to remove the suspense of medical authorities and students, and to gratify the just wishes of the profession.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Sunderland.—Mr. A. E. Harris reports a high mortality for the borough of Sunderland in 1883. The death-rate amounted to 26·4 per 1000 living, and it was associated with a high infantile and zymotic mortality. The deaths amongst infants were more numerous than in any of the nineteen large towns with the exception of Leicester; the rate under one year reaching 186 per 1000 births, as opposed to 192 in the latter borough, and the excess was general throughout the whole urban district. Several points are worth noting in this connexion. In the first place, whereas the number of uncertified deaths in London and the large towns generally has only reached 2·5 per cent. of the total deaths, they

amounted to 5·5 per cent. in Sunderland. Several causes have contributed to this. One is the fact that many of the people are too poor to engage the services of a medical man, and hence they seek the help of midwives. These women are, as a rule, very ignorant, and the frail life of an infant slips away in their hands before any danger is thought of. With a view to deal with this evil, and in the absence of any immediate prospect of legislation as to midwives, Mr. Harris makes a suggestion that the medical men of the borough should elect from amongst their number an examining board, and that they should grant certificates of proficiency to all midwives who exhibit a certain amount of knowledge. The successful candidates would doubtless soon become known, and their services would be specially sought for. Other uncertified deaths occur in cases where unqualified assistants are employed, and Mr. Harris thinks it a great hardship that when the poor call in a qualified medical man and pay his fee they should be put off with persons as to whose skill there is no guarantee. Unqualified assistants are daily becoming less numerous, and we are glad to find that there are but few in Sunderland. Measles also became very prevalent during the year, as many as 191 cases terminating fatally, and this disease to a large extent attacked young children. Of the other zymotic diseases prevalent, enteric fever and typhus deserve note. There was apparently a good deal of enteric fever which could not be easily accounted for as regards origin, and Mr. Harris asks the question whether a type of this disease can exist of so mild a nature as to be unknown to the patient himself. The answer we believe to be in the affirmative. Thus, it has often happened in outbreaks of enteric fever to find patients who though they have discontinued work have never taken to their beds, who only believe themselves to be slightly ailing, and yet who, when examined, exhibit the characteristic rash of the disease. The Germans, too, have drawn special attention to so-called perambulating cases; persons who, though distinctly suffering from enteric fever, are well enough to wander about and to infect privies &c. with their discharges. As many as 106 cases of typhus came under notice during the year, and of these 34 terminated fatally. One group of seventeen cases owed their attacks to a single mild case occurring in a boy, who was not ill enough to need medical attendance, and whose case was accordingly not heard of until the mischief had been produced. This disease was prevalent at the same time in several of the northern boroughs, but at Sunderland its progress was at least to some extent stayed by means of the provision for isolation which is available. The hospital belonging to the sanitary authority is, however, by no means what it should be. It has often been condemned, and its usefulness is materially hindered by the oft-reported fact that it is not a safe place in which to treat two different diseases at one and the same time. Mr. Harris may, under these circumstances, well remind the sanitary authority that there is an extraordinary antipathy to it on the part of the people. It is to be hoped that the Town Council will not wait until they get such another scare as led to the provision of the present building, but that, whilst they have the leisure of a period comparatively free from infectious disease, they will make adequate provision for their district in this important respect.

Torquay.—Mr. Karkeek's annual reports though issued in print are never so long delayed that their contents have lost all their more immediate interest, as is the case with many others. During 1883 Torquay has been provided with an excellent sanatorium, and from the account given as to the various means by which infectious disease is liable to be spread in the town, as by schools, visitors, laundry-work, milk, &c., it will evidently become a useful sanitary institution. A few cases of typhoid fever in the town have led to careful inspection of the affected premises, and to the removal of causes of disease that the regular inspection of the sanitary officers had failed to discover. Such inspection is, however, duly made, new houses are regularly certified before they are inhabited, and a useful sanitary surveillance is maintained. Mr. Karkeek is at present occupied in a house-to-house inspection with reference to unhealthy overcrowding, a subject that might usefully be dealt with even in the most modern of towns.

Stroud (Rural).—This rural district suffers much from want of proper means of water-supply and of drainage. The water is nearly all from springs or wells, and of the latter many are so placed with regard to drains and privies that soakage into them becomes almost a certainty. Dr. Partridge has during 1883 traced many cases of severe sickness to faulty and unwholesome water. Stonehouse is especially in want in this respect, and, as regards means of drainage, all that can be said of it is that it has been talked of for years, and still remains unprovided. The report of the inspector of nuisances shows a useful amount of sanitary work carried out.

Lincoln.—The death-rate for the city in 1883 was 19·2 per 1000. Diarrhœa was less common than heretofore, and this is attributed by Dr. Harrison to be in part, at least, due to the cleansing and scavenging processes which took place whilst the possibility of the importation of cholera existed. The success of such a measure of prevention should not be lost sight of, for a hot summer is certain, with such defective scavenging arrangements as exist, to bring back a recurrence of diarrhœa and its resulting fatality. Some form of destructor is advocated with a view of dealing with the present evils in this respect.

East Dereham (Urban).—Mr. H. B. Vincent has recently issued his sixth annual report for 1883 on the urban sanitary district of East Dereham, which had an estimated population of 5760 in the middle of last year. The birth-rate was equal to 34·0 per 1000, and exceeded that recorded in any recent year; more than 10 per cent. of the births were, however, illegitimate, showing a marked increase upon the proportion in recent years. Mr. Vincent states that the illegitimate birth-rate was 3·5 per 1000 of the population; but illegitimacy, if not measured in the usual method by its proportion to total births, should rather be measured by its proportion to unmarried women of child-bearing ages. The mortality statistics for last year afford favourable evidence of the sanitary condition of this town during last year. The death-rate from all causes did not exceed 18·7 per 1000, which, for an urban district, may be considered satisfactorily low, only exceeding by 1 per 1000 the general rate last year in the rural districts of England and Wales. The value of Mr. Vincent's report would be much inceased by giving a table of statistics for a series of years for comparative purposes. Only 7 deaths were referred to zymotic diseases, giving the low rate of 1·2 per 1000; 4 of these deaths resulted from diarrhœa, including 3 in Baxter-row, where the water-supply is stated to be very inadequate. Throat disease of an obscure character is said to have been prevalent during the year, and probably some of the 4 deaths referred to laryngitis were due to zymotic causes. Infant mortality, measured by the proportion of deaths under one year to registered births, was equal to 112 per 1000, which cannot be considered low for so small a town as East Dereham, although it is said to be lower than the rate in recent years; that it is not lower is probably due to the large proportion of illegitimacy. Nearly 30 per cent. of the deaths were of persons aged upwards of sixty-five years, which is an exceedingly high proportion. Mr. Vincent's method of calculating mortality at groups of ages by the proportion of the deaths at such periods to the population at all ages is not to be commended, as invariably yielding untrustworthy results. Death-rates at groups of ages should be measured by the numbers living at such age-periods. The report speaks favourably both of the local board water-supply and of the system of sewerage, which is said to be in thoroughly good working order.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 6018 births and 3417 deaths were registered during the week ending the 1st inst. The annual death-rate in these towns, which had been equal to 20·1 and 21·1 per 1000 in the two preceding weeks, declined again last week to 20·3. The lowest rates last week were 12·1 in Norwich, 12·5 in Brighton, 13·7 in Derby, and 15·5 in Birkenhead. The rates in the other towns ranged upwards to 24·6 in Preston, 25·9 in Oldham, 26·0 in Wolverhampton, and 29·5 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 415 and 433 in the two previous weeks, declined to 407 last week; they included 121 from whooping-cough, 87 from measles, 75 from scarlet fever, 40 from "fever" (principally enteric), 37 from diarrhœa, 29 from diphtheria, and 18 from small-pox. No death from any of these diseases was registered last week either in Birkenhead or in Halifax, whereas they caused the highest death-rates in Manchester, Leeds, and Oldham. The greatest mortality from whooping-cough was recorded in Liverpool and Manchester; from measles in

Portsmouth and Oldham; and from scarlet fever in Preston, Leeds, Sheffield, and Newcastle-upon-Tyne. The 29 deaths from diphtheria in the twenty-eight towns included 12 in London, 3 in Sunderland, 2 in Birmingham, 2 in Preston, and 2 in Leeds. Small-pox caused 18 deaths, 7 more than those in the previous week, and included 8 in London, 6 in Sunderland, 2 in Birmingham, and 1 in Sheffield. The number of small-pox patients in the metropolitan asylum hospitals, which had been 97, 118, and 130 on the three preceding Saturdays, further rose to 132 at the end of last week, exceeding the number under treatment in these hospitals at any time since August, 1882; 20 new cases were admitted to these hospitals during last week, against 28 in each of the two preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 334 and 345 in the two preceding weeks, fell again to 334 last week, and were as many as 162 below the corrected weekly average. The causes of 98, or 2·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Leicester, Sunderland, Bolton, and Derby. The proportions of uncertified deaths were largest in Cardiff, Halifax, Oldham, and Huddersfield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·9 and 22·6 per 1000 in the two previous weeks, further rose to 23·2 in the week ending the 1st inst.; this rate exceeded by 2·9 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 15·6 and 16·2 in Leith and Dundee, to 27·6 in Glasgow, 28·6 in Perth, and 33·0 in Paisley. The deaths in the eight towns included 84 which were referred to the principal zymotic diseases, showing a further increase of 7 upon the numbers in the two previous weeks; 21 resulted from whooping-cough, 17 from diphtheria, 15 from "fever," 13 from measles, 10 from diarrhœal diseases, 7 from scarlet fever, and 1 from small-pox. The rates from these diseases in the Scotch towns last week ranged from 0·8 in Leith to 4·5 in Paisley, and 5·0 in Greenock. The 21 fatal cases of whooping-cough showed a decline of 5 from the number in the previous week; 15 occurred in Glasgow, and the remaining 6 in Edinburgh. The 17 deaths referred to diphtheria exceeded the numbers in the two previous weeks, and included 5 in Aberdeen, 3 in Edinburgh, and 2 each in Glasgow, Dundee, Greenock, and Perth. The 15 deaths from "fever" exceeded the number in any previous week of this year; 11 occurred in Glasgow, 2 in Edinburgh, and 2 in Greenock. The 13 fatal cases of measles also showed an increase, and included 5 in Edinburgh and 4 both in Glasgow and Paisley. The death from small-pox occurred in Glasgow, and was of an unvaccinated infant aged three months. The 120 deaths referred to acute diseases of the respiratory organs in the eight town showed an increase of 12 upon the number in the previous week, but were 31 below the number in the corresponding week of last year. The causes of 84, or more than 15 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 31·4 and 30·0 per 1000 in the two previous weeks, further declined last week to 25·7. During the first nine weeks of the current quarter the death-rate in the city averaged, however, no less than 28·2 per 1000, whereas it did not exceed 20·1 in London and 20·6 in Edinburgh. The 173 deaths in Dublin last week showed a further decline of 29 from the high numbers in recent weeks, and included 15 which were referred to the principal zymotic diseases, corresponding with the number in the previous week; 7 resulted from scarlet fever, 5 from whooping-cough, 2 from diarrhœa, 1 from measles, and not one either from small-pox, diphtheria, or "fever." These 15 deaths from zymotic diseases were equal to an annual rate of 2·2 per 1000, the rate from the same diseases being equal to 2·3 in London and 4·2 in Edinburgh. The fatal cases both of scarlet fever and whooping-cough showed an increase upon recent weekly numbers; whereas it is a long time since a weekly return for Dublin reported no death from "fever," as was the case last week. The deaths of infants showed a decline last week, and those of elderly persons were less numerous than in any previous week of this year. The causes of 25, or more than 14 per cent., of the deaths registered during the week were not certified.

HEALTH OF CALCUTTA.

The report of the health officer of Calcutta (Surgeon-Major McLeod) on the health of that city during the fourth quarter of last year has just reached this country, bearing date January 15th last. The mortality statistics for the quarter under review were reported to be "extremely satisfactory"; the death-rate was equal to 29·8 per 1000 of the population, but this rate was said to be 7·3 per 1000 below the mean rate in the ten preceding corresponding quarters. The report does not appear to state the number of the population upon which the death-rate is calculated, which is a defect in any report dealing with mortality statistics. The deaths resulting from zymotic diseases were very considerably below the average during the quarter; this especially was the case with regard to the deaths from fevers, cholera, dysentery and diarrhœa, and small-pox. The deaths from cholera in the last three months of 1883 were 369, and were 170 below the mean number in the ten preceding corresponding quarters. Only 6 deaths resulted from small-pox; it appears, however, that only 1448 vaccinations were performed during the quarter under notice, although 2194 births were registered, and these were probably little more than half the births that occurred. These figures show that vaccination is still only partially carried out in the city. The return affords conclusive evidence that the meteorological conditions of the last quarter of 1883 were favourable to health, although the death-rate, judged by the English standard, was for a healthy season remarkably high.

Correspondence.

"Audi alteram partem."

POISONING BY ARSENIC.

To the Editor of THE LANCET.

SIR,—In the report in the *Liverpool Daily Courier* of the recent trial at Liverpool for poisoning by arsenic, a report which is, I am told, more complete than any other, the experts are credited with statements which, if they pass unchallenged, may hereafter be productive of disastrous results in future trials for poisoning by arsenic. I am assured, on the best authority, that the gentlemen in question did not give their evidence as reported. Hence the publication of the report referred to is doubly unfortunate—first, as being a misstatement of technical evidence, and, secondly, as it attributes an undue significance to the absence of solid arsenical compounds from the viscera of the deceased man Higgins, and to the presence of arsenic in his spleen. Dr. Campbell Brown is made to say that he looked carefully for particles of solid arsenic in the viscera, but failed to find a trace, and had there ever been any originally he would have found it. Again, he is stated to have deposed that he obtained from one-third of the whole spleen a large quantity of arsenic. The quantity of arsenic found in the spleen enabled him to form an opinion as to the length of time during which the arsenic had been taken by the deceased. The taking of arsenic must have extended over several days, because the poison must have passed through the whole circulation of the body except the kidney before it was absorbed by the spleen. Had death been caused by one strong dose of arsenic, the result would have been so speedy that the poison would not have reached the spleen. The judge, in summing up, is made to attach immense and remarkable significance to this point—the presence of arsenic in the spleen.

My own experience shows that a person may die speedily after taking a large quantity of solid arsenious acid, and yet not a particle of any *solid* arsenical compound be found in the viscera. Arsenic when taken into the stomach quickly reaches the spleen. I have found it there eighty minutes after the administration of the poison to a rabbit. I have known a person die seven hours after taking one large dose of arsenic, and have found arsenic in the spleen of the deceased. It is within the experience of others that so much as one-third of a grain of arsenic—i.e., as much as was found in twenty ounces of Higgins' viscera—has been found in the

spleen in a similar case. These results are in accordance with the experiments of Orfila and Chevallier on animals.

Fortunately, in the Liverpool trial the presence of a relatively large quantity of arsenic in the spleen of Thomas Higgins was a point of minor importance in comparison with the other irrefragable evidence in the case.

I am, Sir, yours &c.,

London, March 4th, 1884. THOS. STEVENSON.

"IS IT SO?"

To the Editor of THE LANCET.

SIR,—At page 359 of THE LANCET these words form the title of a comment on a remark of Mr. Justice Stephen, to the following effect:—"That the law allows persons charged with a crime to be confined in a private asylum under the certificate of two medical men, and thus protects them from the courts of law." Your note of interrogation induces me to send you the following comments. Mr. Justice Stephen, it is well known, has given special attention to the subject of insanity in its legal relations, and his dictum is of great authority. The only question with me is whether he is rightly understood. Several cases have occurred to me in my life bearing upon this subject, all of them in connexion with a public asylum. Though the insane are sent to a public asylum on one medical certificate, and not two, the principle of the power of the certificate remains the same.

CASE 1.—A young man of weak intellect and supposed to be harmless, living in Westminster, one day struck a neighbour on the head with a bar of iron. He was taken before a magistrate and sent to Hanwell. Erysipelas, &c., occurred in the wounded man, and he died. The coroner issued his warrant for the arrest of the lunatic. It became a question whether he ought to be given up. I gave him up. A discussion arose among the magistrates forming the committee as to whether I had done right or wrong; their opinions were divided. I was myself influenced by the fact that the arrest was not likely to be detrimental to the patient's condition, or, in other words, I decided on purely medical grounds.

CASE 2.—Owing to the carelessness of an attendant, two men were locked in one small room at night. In two hours one was found dead. No application for the murderer's arrest was made. The man remained in the asylum until the criminal asylum was opened. He was already at the time of the murder a criminal lunatic.

CASE 3.—An apparently harmless epileptic and imbecile patient was sent into the field to be employed in spade husbandry. While at work he raised his spade and clove the next patient's head in two. He was arrested and tried at the Old Bailey, and sent to the criminal asylum.

The only portion of the Acts which bears upon the subject of the power of a medical man over his patient is the following, which I here condense:—"Every superintendent licensed to receive or take charge of a lunatic upon a proper order, accompanied with the required medical certificates, shall have power and authority to take charge of, receive, and detain such patient until he shall die or be removed or discharged by due authority; and every writ or other proceeding which shall be brought against such authorised person, the party complained of may plead such order and certificates in defence, which shall be a justification."—(8th and 9th Vic., cap. 100, sect. 99.) I am therefore disposed to reply to your query by saying, "It is not so."

The only power of two medical men signing the certificate, or the medical man in charge of the patient, is that which the profession generally have in all other kinds of cases. For example, a burglar in escaping from a policeman falls from a wall and breaks his leg, and is taken to a hospital. The medical officer of the hospital by his certificate "may protect the man from the courts" so long as his removal would be detrimental. And such is the only kind of power that any medical man can possess in a case of insanity.

In a case of insanity, however, there is an extra guarantee; there are special and legally appointed officers to investigate each case under certificate—the Commissioners in Lunacy. If it be contended that these do not do their duty, that is a legal matter, not a medical one. I do not share in such an opinion. THE LANCET, I am confident, is not the place in which such a sweeping accusation may be found as is contained in the suggestion that it would not be difficult to find three medical men to combine to protect a sane person from the courts of law. But to protect an insane person from all the excitement and mental worry and anxiety of a long legal trial, and the exposure at a public tribunal, is simply a duty which ordinary humanity would call upon everyone to undertake.

I am, Sir, yours obediently,

Boreatton-park, Feb. 25th, 1884. W. H. O. SANKEY.

THE COLD BATH TREATMENT OF ENTERIC FEVER.

To the Editor of THE LANCET.

SIR,—I read with much interest your article in last week's issue on the discussion of the cold bath treatment of typhoid fever at the Medical Society, and I shall esteem it a favour if you will permit me, as one of the opposition, to make a few remarks in your columns on this important subject, which is of such practical interest to the profession.

It appears to me that the discussion went very wide of the mark in considering the general antipyretic treatment of typhoid fever, instead of confining itself to the subject matter brought forward by Dr. Coupland—viz., the treatment of enteric fever by the cold bath, which is the real question at issue. No one would, I presume, question the efficacy of sponging and wet packing in some cases of typhoid fever, but these methods were indiscriminately mixed up with the employment of the cold bath in the statistics which Dr. Coupland and others brought before the Society, and the treatment by cold, whether by sponging or bathing, was so vaguely indicated that the effect of the cold bath *per se* could not be accurately determined. But, notwithstanding this discrepancy in their favour, some of the statistics not only showed a higher mortality from the cold treatment, but the average duration of the disease, as shown by Dr. Coupland's tables, was greater in the cases treated by cold than those which were not.

With regard to the physiological action of cold on the body, as explained by the advocates of the cold bath, I am at a loss to understand how, with the nervous system lowered and the circulation enfeebled as they are in typhoid fever, such a depressing agent as the cold bath can, as Dr. Coupland asserts, "act as a powerful stimulant to the nerve-centres and rouse into action the heat-controlling centres." Nor can I agree with Dr. Cayley's physiology, that cold "diminishes metabolism"; for it has been proved by Luntz's experiments that external cold increases the metabolism of the body, and would thus give rise to "those delirious products which induce the typhoid state." As to Dr. Sansom's contention that the application of cold to the surface of the body would not necessarily drive the blood into the internal organs, on the ground that there are other more superficial reservoirs for its disposal, I disregard such as physiological quibbling, and prefer to be guided by the simple common-sense view that the cutaneous vessels *are* contracted by the application of external cold, and the internal vascular areas *are* dilated, which cause a larger flow of blood through the abdominal viscera. And I maintain that in enteric fever, where there is a liability to congestion or engorgement of the liver and spleen, and a consequent obstruction of the portal circulation, the cold bath, by increasing the hepatic congestion and thus impeding the portal circulation, must increase the liability to intestinal lesions and hæmorrhage. The kidneys may also participate in this internal determination of blood, and, as recovery in typhoid fever so much depends on the eliminatory function of these organs being unimpaired, any congestion of their structure which would interfere with the excretion of urea and other effete products must necessarily be most injurious. Hyperpyrexia alone seldom kills in typhoid fever, but when it becomes a source of danger it is generally indicative of severe internal lesions, and in quenching the fever by the cold bath the patient's life is likely also to be put out by aggravating those lesions on which the high temperature depends.

I have had experience of the cold bath treatment of typhoid fever both in the Army and in private practice, and have been led to form an unfavourable opinion of it. In a case which came under my care in the latter sphere, I believe that the cold bath caused the patient's death. It was that of a young gentleman in whom the fever ran a regular course without any complication till the beginning of the third week, when the temperature, which had not exceeded 102°, rose to 105°, and it was determined in consultation to administer the cold bath. With the exception of the persistent high temperature there were no unfavourable

symptoms. The graduated bath from 100° to 70° was given, and it was used with the greatest care. I shall never forget the shivering and exhaustion that followed its use. Dr. Coupland refers to the "calm sleep" that ensues from it. This patient, after the second bath, fell into a sleep from which he never awoke. He became comatose, pulmonary congestion supervened, and he died a few days after. This case made a very deep impression on me, and with the recollection of it before my mind, and holding the foregoing views, I regard the cold bath treatment of typhoid fever as bad practice and fraught with the most dangerous consequences. I am, Sir, yours obediently,

W. M. COLLINS, M.D.,
Cadogan-place, S.W., March, 1884. Surgeon, Royal Horse Guards.

FOR URETHRAL MALADIES.

To the Editor of THE LANCET.

SIR,—Will you do me the favour to give space to the following formula for an injection which I find of great service in cases of urethral trouble known by the several terms ending in -rhœa? These affections are common, underlying causes of "mind-worry" and "nervousness." When other remedies have failed, I find this injection, used twice a day with one of Squire's convenient and safe syringes, puts an end very speedily to the local inflammation and its consequences. It is possible it may be useful in other cases of analogous pathology. The only difficulty is to get the injection well prepared. I therefore write the prescription thus:—

℞ Infusi foliorum recentium saxifragæ, ℥iii. [Faciat, ex aquâ calidâ, xcviii.° Fahr., per horas sex; foliorum l., aquæ x.] Glycerini, ℥i. Misce. Fiat injectionem, ut bis die utendum. I am, Sir, yours faithfully,

J. MORTIMER-GRANVILLE.
Welbeck-street, Cavendish-square, W.

"A SOCIETY OF MEDICAL OFFICERS OF SCHOOLS."

To the Editor of THE LANCET.

SIR,—When I suggested to Dr. Alder Smith, some five years ago, the formation of a Society of the medical attendants at our public schools, you were good enough to offer, on my making a similar suggestion to you, the use of a room at THE LANCET Office for the first meeting. If this offer could be renewed, it would, I think, further the very desirable object.

I am, Sir, yours faithfully,
Wokingham, March 4th, 1884. J. G. BARFORD.

*** We shall be happy to assist in any way in our power in the furtherance of the object above-mentioned.—ED. L.

THE SUPPLY OF WATER BY METER.

To the Editor of THE LANCET.

SIR,—I have noticed with regret the proposition which is to be submitted to Parliament by the Corporation of London to supply water by meter. Surely, if such an unfortunate and retrograde step were taken, the underground cesspools which exist in London in the form of foul house drains, to the extent in the whole metropolis of *four thousand miles at least*, would be still more choked with human excreta, and an alarming increase of zymotic diseases must be anticipated. I have recently examined a soil-pipe (six-inch) from a water-closet which was *vertically* placed, and even that pipe contained a large accumulation of foul matter; and there can be no doubt whatever that any diminution in the flushing of the house drains in a great city like the metropolis would be attended with serious injury to the public health, and should be viewed with great alarm.

I am, Sir, yours obediently,
Birmingham, March 3rd, 1884. E. CHESSHIRE, F.R.C.S.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

NORTHERN COUNTIES HOSPITAL FOR DISEASES OF THE CHEST.

THE annual meeting of this institution, which seems to be growing in usefulness and public favour, was recently held. The report showed that the financial position was good, and the committee had decided upon reducing the price of their letters, giving six for each subscription of one guinea. The operations of the charity had been hampered for want of suitable space, but a difficulty still presented itself of finding suitable premises for the hospital. At the same meeting Dr. Wm. Murray was appointed consulting physician.

NEWCASTLE DISPENSARY.

The annual meeting of this charity has also been held During the year the governors have received in legacies the sum of about £7000, and from the Hospital Sunday Fund over £400; and the committee have been enabled to invest £11,000 during the year. The number of patients treated had been over 7000. The casual patients had contributed £117, being at the rate of twopence each, but anyone acquainted with the class of patients attending the dispensary will doubt that this paltry sum by any means represents what the patients might pay had the contributions been in fair proportion to their means. The dispensary has now a large amount of invested capital and a good subscription list, and it is felt that it might very properly and with great advantage employ a portion of its funds in establishing a country sanatorium or convalescent home for some of its many patients, and thus relieve the pressure on the Prudhoe Home at Whitley. It is often pointed out that during a very considerable portion of the year this excellent seaside institution is not at all suitable for a variety of chest and other cases.

NEWCASTLE CHILDREN'S HOSPITAL.

The annual meeting was held a few days ago at the Children's Hospital, under the presidency of Sir W. G. Armstrong. The hospital during the past year had received some handsome sums in legacies, but the ordinary expenditure had exceeded the regular income for the past two years. The want of a convalescent home for the children was referred to in the report, but the committee expressed the opinion that the present state of the finances of the hospital rendered it inexpedient to enlarge the expenditure. What the Children's Hospital is, however, now unable to do in the way of establishing a convalescent home at present might very well be done in co-operation with other institutions—the Dispensary, for instance, with its abundant and growing funds. Some mode should be promptly adopted, if only as a measure of justice to the medical staff, by which the little convalescents might be carried from the present dingy building into light and air.

SUNDERLAND HOSPITAL SUNDAY.

The annual Sunday Hospital Collection has been taken in Sunderland, but so far there is a visible decline as compared with last year, and this, it is to be feared, is significant of the depression which has set in in the shipbuilding trade and several of the industries of the town.

Newcastle-on-Tyne, Feb. 27th, 1884.

IRELAND.

(From our own Correspondent.)

THE MEDICAL ACTS AMENDMENT BILL.

A DEPUTATION consisting of seven members of Council of the Royal College of Surgeons had an interview on Monday last with his Excellency the Lord-Lieutenant, to bring under his notice the views of the College in reference to the Medical Bill. They stated that they came to communicate certain resolutions passed at a recent special meeting of the College in reference to the proposed legislation. The first resolution was to the effect that they were desirous to aid in the accomplishment of such reforms as have been found to be necessary, and wished to maintain the rights and privileges of a College which they considered would be unnecessarily and unjustly interfered with by the proposed Bill. The Bill proposed to establish Divisional Boards, which would supersede the present institutions in all their most important functions, and thereby reduce them to a state of uselessness and poverty. They therefore prayed his Excellency to use his influence to have the matter reconsidered before the Bill was proceeded with. The Lord-Lieutenant, in his reply, said that Lord Carlingford was most anxious to press forward the measure, and probably there might be a

good many questions upon which some alteration to meet their views might be made. He was certain Lord Carlingford would take these into account, but he must not encourage them to think that he would withdraw the Bill, to which he and the Government attached immense importance, as it was most desirable for the community that a Bill affecting the interests of everyone connected with this important profession should be passed into law.

POST-MORTEM EXAMINATIONS AT HOSPITALS.

An inquest was held in St. Vincent's Hospital, Dublin, last week, on the body of a patient who had died in that institution, and on whom a post-mortem examination had been made, contrary to the wishes of her family. The physician under whose care she was, it appears, deemed it necessary to clear up a disputed point in the diagnosis of the case, and therefore made an examination after death in the interests of medical science. This was an error of judgment on the part of the physician, for which he afterwards expressed his regret. For, as the coroner very properly pointed out, however men may differ in opinion as to the desirability of post-mortem examinations, or their necessity, all will agree that no particular family should be made the means of providing scientific information without their consent.

BELFAST ROYAL HOSPITAL.

At a quarterly meeting of the board of management held last week it was shown that the growing demands made upon the hospital for admission have increased the ordinary expenditure, and as a consequence the institution was at that date nearly £1700 in debt. The donations and bequests have also been less than usual, but the response made by the artisan classes has been of a cheering character, and there is reasonable ground for believing that their subscriptions will at no far distant date be one of the main sources of the income of the hospital. Hospital Sunday in Belfast, for whatever reason, has never seemed to flourish, and so far has never been properly worked. Up to the present fifty-six churches made collections for this purpose, and a sum of £451 has been handed over to the Belfast Royal Hospital, the only hospital in Belfast which benefits by the fund. There may be a few additional churches which have not sent in their collections, but even with this addition the total amount is less than that of the preceding year, and altogether unworthy of a populous and wealthy town like Belfast.

COUNTY KERRY INFIRMARY.

In the Court of Queen's Bench last week the Lord Chief Justice delivered judgment on a motion for a *quo warranto* directing Dr. Neligan, who was elected surgeon last June, to disclose the authority by which he claimed to be a surgeon. The litigation was brought by Dr. Fitzmaurice, who was an unsuccessful candidate, and he alleged that certain governors of the infirmary who recorded their votes for Dr. Neligan were not entitled to take any part in the election. The case turned on the construction of two statutes of George III., the intention of which was to prevent persons paying subscriptions merely to qualify for voting. The Court held that Dr. Neligan was not duly elected, but would not express any opinion as to whether Dr. Fitzmaurice should be elected.

Dublin, March 4th.

PARIS.

(From our Paris Correspondent.)

THE RESULTS OF M. MILNE-EDWARDS'S EXPEDITION.

AN exhibition worth visiting is now being held in Paris in the Rue Buffon, which is contiguous to the Jardin des Plantes. It is one of the most curious, instructive, and interesting exhibitions I have seen. Here are shown the submarine animals and plants collected in the depths of the ocean by M. Milne-Edwards, the celebrated naturalist, which he brought over in the *Travailleur* and the *Talisman*, two ships that were placed at his disposal by the French Government in 1880. M. Milne-Edwards undertook to explore the Mediterranean, the coasts of Spain and Portugal, and the Bay of Biscay. He also visited the group of islands to the west of Spain and the coast of Morocco, and steered down as far as Senegambia. During his explorations M. Milne-Edwards took soundings to the depth of 6067 metres, or about 19,685 feet, and by appropriate apparatus brought up the most marvellous collection of heteroclite beings ever seen. They have certainly puzzled even the most accomplished naturalists, for though some of these were easily classified from their resemblance to types already more or less known, yet there were others whose position it was difficult to assign either to a zoological or botanical class. The objects are beautifully prepared, classified, labeled, and arranged with the greatest care. A large map indicates the routes of exploration; another gives the aspect in relief of the depths of the ocean reached by the plummet. The drags and other apparatus employed for the occasion are also exhibited. Among the objects brought up are to be seen mud, sand, argil, débris of shells, foraminifera and protozoa, scarcely visible, and a large piece of rock weighing more than 100,000 grammes, or a little over 200 lb. The exhibition will be closed on the 15th inst.

CARBOLIC ACID IN TYPHOID FEVER.

In a paper read by Dr. Albert Robin at the last meeting of the Academy of Medicine, the author condemned the use of carbolic acid in typhoid fever on the ground that it increases the elimination of sulphur and potash, histogenetic elements, which are already too freely eliminated from the system in typhoid fever. Dr. Robin believes that a great number of accidents which occur during the administration of carbolic acid in typhoid fever are due in a great measure to this substance. On the same grounds, Dr. Robin would proscribe in the treatment of typhoid fever all substances that are eliminated in the same way as carbolic acid; these are creasote, thymol, naphthol, resorcin, vanillin, benzol, anilin, &c.

BANQUET TO PROFESSOR BOULEY.

A banquet was lately given to Professor Bouley, Inspector-General of Veterinary Schools, on the occasion of his recent election as Vice-President of the Academy of Sciences. In proposing the toast of the evening, M. Pasteur, who presided over the banquet, recalled the important works of M. Bouley, which had so greatly contributed to the progress of comparative pathology, and from which human pathology had drawn so much. It was resolved by the members present to strike a medal to commemorate the event.

Owing to ill-health on the part of M. Vulpian, Professor of Experimental Pathology at the School of Medicine, Dr. Hallopeau, agrégé, has been appointed temporarily to occupy the chair.

A ministerial decree has just appeared in the *Journal Officiel* to the effect that the new edition (1884) of the French Pharmacopœia is to be adopted on the 15th inst.

Paris, March 4th.

THE SERVICES.

Surgeon-Major P. W. Stafford has succeeded Surgeon-Major Gasteen as a member of the Permanent Committee on the Dress and Equipment of the Army, presided over by Colonel Harrison, V.C., C.B. Surgeon-Major Hector, A.M.D., has been appointed Honorary Surgeon to the Viceroy of India, in room of Surgeon-Major Roe, transferred to the Home Establishment. Brigade Surgeon McDowell, who is in medical charge of the expeditionary force under General Graham, will have the local rank of Deputy-Surgeon-General while so employed. Deputy Surgeon-General R. Wolseley, M.D., is proceeding to Aldershot to take over the duty of sanitary officer of the division, vice Deputy Surgeon-General J. Thompson, A.M.D., ordered to Dublin for duty.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Charles Edward Wikeley, retired pay, has been granted the honorary rank of Brigade Surgeon; Surgeon-Major Daniel Murray, M.D., is granted retired pay, with the honorary rank of Brigade Surgeon.

ADMIRALTY.—Deputy Inspector-General James Nicholas Dick has been promoted to the rank of Inspector-General of Hospitals and Fleets in Her Majesty's Fleet.

The following appointments have been made:—Deputy Inspector-General Timotheus J. Haran, to Malta Hospital, in the place of Mr. James N. Dick; Staff Surgeon Donald MacIver, M.D., to the *Euphrates*, complement incomplete.

Obituary.

DR. ARMAND LESLIE.

IT was with much regret that we had to record, in one of our previous issues, the death of Surgeon Armand Leslie, who was killed at the battle of Teb, Soudan, on Feb. 4th last. He was born in 1845, and was a son of the late David Leslie, M.D., of Leslie Hill, in the county of Armagh, Ireland, and of Lower Wandsworth, London. After concluding his studies at a French lycée, the subject of our notice returned to England in 1861, and then commenced to study for the medical profession under his father's tuition. Some years later he was entered as a general student at Middlesex Hospital, and in 1868 he received the diploma of Membership of the Royal College of Surgeons of England. Towards the close of 1868 he was appointed one of the medical officers on the staff of the Poti and Tiflis Railway Company in the Caucasus, where he remained until 1872. In 1876 he was sent out to Servia by the British National Society for Aid to the Sick and Wounded in War, under the charge of Colonel Loyd-Lindsay and Dr. (now Sir) William Mac Cormac. After a short stay with the Servian Army Dr. Leslie was placed in charge of the Society's Ambulance at Alexinatz. Peace being concluded between Turkey and Servia, Surgeon Leslie returned to England early in 1877, after having been awarded the Order of the Medjidie of the third class in recognition of his valuable services. In the following spring Russia declared war against Turkey, and Dr. Leslie was appointed by the British National Society their principal medical officer. During the campaign Dr. Leslie was taken prisoner by the Russians and suffered great hardship, being only released through the urgent representations of the English Consul at Adrianople. At the close of the war Surgeon Leslie returned to England, receiving, in addition to a vote of thanks for his valuable services from the National Society for Aid to the Sick and Wounded in War, the Osmanie of the fourth class from the Ottoman Government. Soon after his return home he was one of the three medical men selected by the British Government to go to Russia to investigate the nature of the plague then raging near Astrachan; but, owing to the active part he took with the Turks, his selection was unfavourably viewed by Russia, and subsequently cancelled.

In 1879 he entered into an agreement with the War Department to act as surgeon in Her Majesty's forces at the Cape of Good Hope. He came home shortly after the battle of Ulundi, and was awarded the Zulu War Medal.

In 1883 he was one of the twelve medical men sent out by the British Government to assist the Egyptian authorities during the cholera epidemic. Owing to his knowledge of foreign languages, he was stationed at Cairo, where his services were highly appreciated, and where he speedily became very popular. He was on the eve of his departure for England last December, in fact he had already secured his passage, when Baker Pasha offered him an appointment on his staff as Chief of the Medical Department. He at once proceeded to Souakim, and at the early age of thirty-nine he fell in the battle of Teb, thus ending a comparatively short but nobly employed life.

MEDICAL NOTES IN PARLIAMENT.

Educational Pressure.

IN the House of Lords on Thursday week, Earl de la Warr gave notice that on an early day he would call attention to the death of a child at Cheltenham, which was alleged to have been accelerated by mental strain from overwork in school.

The Medical Bill.

On Thursday, the Medical Act Amendment Bill came forward for second reading. Lord Carlingford said this was the same Bill which passed the House of Lords last session after considerable discussion, and which the other House had not time to discuss. The Government had therefore thought the best plan was to bring in the Bill again in its original form, and he hoped their lordships would send it again to the other House to be passed into law for the benefit of the medical profession and of the public. The Bill had been improved in respect to drafting; but there was only one amendment he ought to mention, and that referred to the constitution of the Medical Board for Scotland. It was thought right last year, in accordance with the strong opinion of the Royal Commission on this subject, that the Scotch Universities should have a decided preponderance of members on the Board for Scotland; but the proportion of representation for the Universities and for the Scotch medical corporations proposed in the Bill of last year was somewhat exceptional. The number of representatives of the Scotch Universities was fixed at eight, and that of the Scotch medical corporations at three. In the present Bill he had raised the latter number from three to five, which would still leave the majority which they ought to enjoy to the universities. The Bill contained some other minor, but still important, new provisions—dealing, for instance, with the status of foreign and colonial practitioners in this country, which had long called for recognition and improvement, upon which the status and privileges of our own practitioners in other lands absolutely depended. Their lordships would recollect that the main object of the Bill was to put the system of licence registration for the purpose of the practice of medicine and surgery in the three kingdoms on a more satisfactory footing than it was at present—a footing which must give security to the public that every practitioner who should have conferred on him the right to practise should be reasonably qualified to practise. It could not be said that the present system attained that object—a system under which the right to confer the licence to practise was left in the hands of a large number of licensing bodies independent of each other, acting under a very imperfect responsibility, and continually beset by the temptation to compete with one another, and to compete, of course, in a downward direction. That temptation it had not been possible always to prevent, so that there had been far too much underbidding one another among those medical bodies for the purpose of drawing pupils and members each to itself. The Bill proposed, in accordance with the recommendations of the Royal Commission, to remedy this state of things by creating a Medical Board in each of the three countries fairly representing the licensing bodies, such boards to be under the superintendence of a Central Medical Council which alone should have the right of conferring the licence to practise. The Bill had the great advantage of being based upon the full inquiry and able report of the Royal Commission presided over by the noble earl behind him (Lord Camperdown). It had also the great advantage of a large amount of support from the great body of the medical profession. He might fairly say that no previous Bill had enjoyed anything like the same amount of support from the body of the profession. The only point in respect to which it was opposed, so far as he knew, arose from the alarm, greatly exaggerated and unfounded, of some of the licensing bodies, who feared that their privileges and income might be sacrificed or injured by the operation of the Act. The Government did not believe, as the Royal Commission did not believe, that that would be the effect. They desired that the medical corporations should hold their ground and should flourish and prosper in proportion to the services which they were able to render to the profession and the public. He asked their lordships to read the Bill a second time. No efforts would be spared by the Government to carry it into law this session; and he trusted it would operate as much for the benefit and credit of the great profession with which it dealt directly, as it would be for the vital advantage of the public generally, who were deeply interested in it. He moved that the Bill be read a second time.—The Earl of Milltown regretted that a longer time had not been given to the House and the country for the consideration of this Bill, which was only delivered on the previous day. Under these circumstances it was useless for him to attempt to discuss it. He knew, however, that two of the most famous medical colleges in Ireland were extremely apprehensive that the provisions of this Bill might lead to their virtual disestablishment and disendowment. He hoped that these apprehensions were not well founded. At any rate, he hoped that the noble lord would consent to put forward the committee stage to a more distant date than was usual.—The Earl of Galloway said he was very grateful to the noble lord for having altered the numbers composing the Board for Scot-

land; that he had seen his way to giving a larger number of representatives to the medical colleges. The numbers eight and five would meet all the requirements of Scotland.—Earl Granville said the noble Earl of Milltown could not have heard what his noble friend (Lord Carlingford) said—namely, that this was the same Bill which was passed by that House last year.—Lord Milltown said he understood that some changes had been made in that Bill. — Lord Carlingford said the changes were very small. The Bill was practically identical with that of last year.—The Bill was then read a second time.

School Work.

In the House of Commons, on Friday, Mr. Mundella stated to Mr. S. Leighton that the effect of the New Code was to relieve children of tender years from pressure. It empowered teachers and managers to withdraw delicate children from examination; but the Department thought that was insufficient, and they were now considering how they could best protect such children from being overworked during the year previous to the examination.

Fever Hospital at Winchmore-hill.

Lord G. Hamilton complained that the Local Government Board had authorised the placing of a fever hospital at Winchmore-hill without giving an opportunity to the local authorities to state their objections. Mr. G. Russell said the Southgate Local Board did not ask for an interview until it was too late. This site appeared to be as free from objections as any site could be.

London Bakehouses.

On Monday, in reply to Mr. Broadhurst, Mr. Russell said the Local Government Board had received a report from the medical officer of Lambeth as to a number of bakehouses in which sanitary defects existed. Notices had been served upon the owners, and inspection would frequently be made. As to the construction of underground bakeries, a clause was introduced into the Factory and Workshops Bill of last session, but it was opposed and withdrawn. If experience should show that further legislation was required, the Local Government Board would be prepared to propose it.

The Army Hospital Corps.

Sir T. Lawrence asked the Secretary for War whether any steps were being taken to carry out the recommendations of Lord Morley's Committee as to the closer union of the Army Medical Department with the Army Hospital Corps.—Lord Hartington said this recommendation was one of many that were contained in the report of Lord Morley's Committee. He hoped to make a general statement of the intentions of Her Majesty's Government with regard to that report when he introduced the Army Estimates.

Charitable Trusts.

On Tuesday, Mr. Shaw Lefevre stated to Mr. James that he proposed to move for a committee to inquire into the expediency of amending the Charitable Trusts Acts.

The Indian Medical Service.

Mr. Cross informed Mr. Leamy that five appointments had just been made to the Indian Medical Service. It was not the fact that they would have no chance of permanent employment for at least six years. Even under the present stagnation twenty-five permanent appointments were held by gentlemen of six years' service and under, and that number would rapidly increase with the present limited admission to the service.

Mr. Gibson gave notice that on an early day he would call attention to the grievances of the Indian Medical Service, and move a resolution.

Home Lessons.

Mr. Talbot gave notice to ask the Vice-President of the Council whether his attention has been called to a memorial addressed to the School Board at Bradford, signed by over fifty medical men of that town, in which they pray the Board to direct that home lessons shall not be enforced on children under ten years of age; and whether he proposes to take any steps to limit pressure upon children of tender age in this direction.

On Wednesday, Mr. Reid gave notice that on the 12th inst. he would move for leave to introduce a Bill to prohibit vivisection.

The Contagious Diseases Acts.

A return was presented, on the motion of Sir H. D. Wolff, showing the number of soldiers admitted to hospital on account of venereal diseases subsequently to the abolition of the compulsory examination of women.

Lady Strangford's Hospital.

On Thursday, Sir J. Hay asked the Under Secretary of State for Foreign Affairs on what grounds His Highness the Khedive had been advised to withdraw his support from Lady Strangford's Hospital at Cairo. Lord E. Fitzmaurice said the subject referred to was entirely within the competence of the Egyptian Government, but he had no objection to forward the hon member's question to Sir E. Baring.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 28th:—

Boyd, Joseph Thos., Northcote-road, Wandsworth-common.
Brooks, Jabez Pratt, Tollington-park.
Hayward, Arthur Ernest, Maxilla-garden, Notting-hill.
Hichens, Frank, Redruth, Cornwall.
Morinni, W. Raoul de, Myddelton-square.
Plowman, Sidney, St. Thomas's Hospital.
Satchell, Charles George, Caversham-road.
Simms, Henry, Pedmore, Stourbridge.

The following gentlemen also on the same day passed the Primary Professional Examination:—

John Charles Michell, London Hospital; Hugh Jones Roberts, Guy's Hospital.

AT Witley on the 23rd ult. a woman was fined twenty shillings for exposing a child who was suffering from scarlet fever.

THE Princess Christian of Schleswig-Holstein has decided that the net proceeds from the sale of "The Letters of the Princess Alice" (translated into English by her Royal Highness) shall be devoted to the fund in aid of the Princess Alice Memorial Hospital at Darmstadt.

AT the annual general meeting of the Sanitary Assurance Association held on the 25th ult., Professor F. De Chaumont, M.D., F.R.S., and Mr. George Aitchison, A.R.A., F.R.I.B.A., were re-elected members of the Executive Council.

PRESENTATION. — The officers, attendants, and servants of the Haydock Lodge Asylum have presented Dr. Shaw with a case of instruments and an illuminated address, on the occasion of his relinquishing the post of medical superintendent of the institution.

BY a resolution proposed by Mr. Mark Judge, at a St. Pancras Vestry meeting, and carried by a large majority, a committee has been appointed to consider and report on the question of providing public lavatory accommodation in such a way as, whilst offering a boon to the community, shall not prove to be a nuisance.

COST OF INQUESTS IN MIDDLESEX.—A statement has recently been prepared showing the number of inquests, the coroners' salaries, and the expenses for the county of Middlesex for the past year, as follows:—Western District: Dr. Diplock, 793 inquests; salary, £800; expenses paid, £1554 13*s.* Central District: Dr. D. Thomas, 1660 inquests; salary, £2099 13*s.* 4*d.*; expenses paid, £3179 2*s.* 6*d.* Eastern District: Sir J. Humphreys, 1960 inquests; salary, £2207 14*s.* 8*d.*; expenses paid, £3033 17*s.* 11*d.* Westminster: Mr. Bedford, 392 inquests; salary, £500; expenses paid, £815 7*s.* 9*d.* Duchy of Lancaster: Mr. Payne, 52 inquests; salary, £54 9*s.* 4*d.*; expenses paid, £118. Making a total of 4857 inquests; salaries, £5661 17*s.* 4*d.*; expenses, £8701 11*d* and the average of cost of each inquest £2 19*s.* 2*d.* Since last year the total increase in the number of inquests is 454, and the net increase of cost is £338 13*s.* 5*d.*

ON the proposal of Professor Erhardt the Council of the University of Kiev has limited the number of Jewish medical students to 10 per cent. of the classes.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The Organising Committee of the section of Mathematical and Physical Science have selected for special discussion at the forthcoming meeting of the Association at Montreal the following subjects:—On Friday, August 29th: The Seat of the Electro-motive Forces in the Voltaic Cell. On Monday, Sept. 1st: The Connexion of Sun Spots with Terrestrial Phenomena.

THE EXPLOSION ON AN AUSTRALIAN LINER.—On Wednesday an inquest on the three men who have died from injuries received in the explosion which occurred on March 1st, off Gravesend, on board the steamship *Aberdeen*, was resumed. Further evidence having been received, the jury returned a verdict of accidental death, and recommended that in future fireworks should be stored in a different magazine from gunpowder.

SEWAGE AND SEWAGE DIVERSION.—A lecture on this subject was delivered on the 23rd ult., at Cambridge, by Prof. Henry Robinson. The subject was treated in an exhaustive manner, special attention being paid to the principles upon which sewers should be constructed. The disposal of sewage was discussed, and a model of an apparatus was shown by means of which the water could be removed from the mud left at the bottom of the tanks after filtration, and a semi-solid cake of mud left which was easily removable in a cart.

WELLINGTON COLLEGE.—The Prince of Wales presided on Wednesday at a meeting of the governors of Wellington College, held at Marlborough House, Pall-Mall. The other governors present were Colonel Talbot (Vice-President), the Duke of Cambridge, the Archbishop of Canterbury, the Earl of Morley, the Earl of Redesdale, Earl Cairns, Viscount Eversley, Viscount Cranbrook, Colonel Stanley, M.P., the Right Hon. S. H. Walpole, Sir Lintorn Simmons, Sir Edmund Whitmore, Mr. Walter, M.P., and the Rev. Dr. Harper. Mr. J. F. Chance, the Secretary, was in attendance.

CHILDREN'S HOSPITAL, ABERDEEN.—At a meeting of subscribers to this charity held a few days ago the financial and medical reports were read and considered highly satisfactory. By means of the bazaar under the patronage of H.R.H. Princess Beatrice, and from various donations, the building fund now reaches over £4000, and it is proposed at once to commence the building of such additions as will double the accommodation at the hospital. It is satisfactory to note that this charity now seems to elicit an amount of generous consideration unsurpassed by any of the other excellent institutions in Aberdeen.

ROYAL LONDON OPHTHALMIC HOSPITAL.—The annual general meeting of the governors of this charity was held on Tuesday, at the hospital, Moorfields. The report for 1883, which was unanimously adopted, set forth that 100 beds had been occupied by 1988 in-patients, and that 3425 operations had been performed by the surgical staff, who had also seen, advised, and prescribed for 24,438 out-patients. The contributions received amounted to £3659, or £1322 less than in 1882. Several large legacies, however, had been received. By the exercise of economy the committee had been enabled to provide for the maintenance of a larger number of patients at a smaller cost than in 1882. No case of eye disease necessitating in-door treatment was refused admission.

THE GEOLOGICAL SOCIETY.—At the anniversary meeting of the Geological Society, held last month, Professor T. G. Bonney, F.R.S., was elected president, in the room of Mr. J. W. Hulke, F.R.S., whose term of office had expired. The medals in the gift of the Society were presented as follows:—The Wollaston Gold Medal to Professor A. Gaudry of Paris, for his palæontological researches; the Murchison Medal and a grant of 10 guineas to Dr. Henry Woodward, F.R.S., of the British Museum, for his valuable researches into the structure and classification of the Fossil Crustacea; and the Lyell Medal, with a sum of £25, to Dr. Joseph Leidy, of Philadelphia, for his investigations on the Fossil Mammalia of Nebraska and the Sauria of the United States of America.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ATKINS, GEO. PURCELL, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Destitute Board for Stanley and Mintaro, S.A.

BUCHAN, WILLIAM A., M.B.Edin., has been appointed House-Surgeon to the South Devon Hospital, Plymouth.

DOWNIE, J. WALKER, M.B., has been appointed Lecturer on Diseases of the Ear and Throat at the Western Medical School, Glasgow.

FULTON, JOHN, M.D., C.M.Glas., has been appointed Principal Medical Officer to the Victorian Defence Forces.

GIBBS, ROBERT, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Teignmouth District of the Newton Abbott Union.

LANGFORD, WILLIAM, M.R.C.S., has been appointed Health Officer for the Shire of Gisborne, Victoria.

MCCLELLAND, JOSEPH, M.D., M.R.C.S., late Honorary Assistant-Physician to the Liverpool Infirmary for Children, has been appointed Honorary Physician to that institution, vice Dr. Armstrong, resigned.

MARSH, JOHN HENRY, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Hulton District of the Bolton Union.

POPE, HENRY B., M.B., B.Ch.Dub., has been appointed Medical Officer for the Eardisley District of the Kington Union.

POWELL, SIMPSON, M.B., M.R.C.S., has been appointed Assistant-Physician to the Hospital for Epilepsy and Paralysis and other Diseases of the Nervous System, Portland-terrace, Regent's-park.

RYGATE, DAVID JOHN, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Second District of the Cambridge Union.

SPICER, R. H. SCANES, M.B., B.Sc Lond., has been appointed Medical Superintendent to the new Infirmary, Fulham, S.W.

TURNELL, ARTHUR PYTHIAS, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Fourth District of the Cambridge Union.

WOOD, G. BENINGTON, M.B., C.M.Ed., has been appointed Resident Medical Officer to the Jersey General Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

BROOKS.—On the 23rd ult., at Richmond-road, Bayswater, W., the wife of W. Tyrrell Brooks, M.B., of a son.

DOWNES.—On the 4th inst., at 8, Hatherley-grove, Westbourne-grove, the wife of Dr. Edmund Downes, of a son.

GASKELL.—On the 26th ult., at Grantchester, near Cambridge, the wife of Walter H. Gaskell, M.D., of a daughter.

LUNN.—On the 3rd inst., the wife of J. R. Lunn, F.R.C.S.Ed., Medical Superintendent of the Marylebone Infirmary, Nottinghill (prematurely), of a son, who only survived his birth a few hours.

MURRAY.—On the 5th January, at Mozufferpore, Bengal, the wife of Surgeon R. D. Murray, M.B., of a daughter.

PIKE.—On the 12th January, at Launceston, Tasmania, the wife of Charles J. Pike, M.B., of a daughter.

MARRIAGES.

ALLEN—TIPPLE.—On the 28th ult., at Central-hill Chapel, Upper Norwood, John Davis Allen, M.D., M.A.Edin., eldest son of J. Allen, Esq., of Wotton, Gloucester, to Gertrude Anne, eldest daughter of the Rev. S. A. Tipple, of Norwood.

NOLAN—COOKE-YARBOROUGH.—On the 23rd ult., at Holy Trinity Church, Hastings, D. D. Lyster Andrew Nolan, L.R.C.S.I., L.K.Q.C.P.I., to Gertrude Flora, younger daughter of the late Geo. Cooke-Yarborough, J.P., D.L., of Campsmount, Yorkshire.

DEATHS.

CHRISTIE.—On the 27th ult., at Tunbridge Wells, James Christie, M.D.Aber., of Gowanlea, Westfield, Dundee.

DEMPSEY.—On the 29th ult., suddenly, Meldon Joseph Dempsey, M.D., of Charterhouse-square, aged 34.

EASTES.—On the 2nd inst., at his residence, London-street, Folkestone, Silvester Eastes, M.R.C.S., J.P., aged 71.

GREIG.—On the 27th ult., at his residence, York-place, Clifton, Bristol, Charles Greig, F.R.C.S.

HART.—On the 27th ult., at Springfield-place, Bath, William Hamilton Hart, M.R.C.S., L.S.A.Lond., eldest son of J. H. E. Hart, C.E., of Poona, India, in his 26th year.

MADDEN.—On the 29th ult., at his residence, Bloomfield-place, Bath, Henry Ridewood Madden, M.D. (formerly of Brighton and London), in his 66th year.

REMINGTON.—On the 2nd inst., Thomas Remington, M.D., formerly of Brixton, aged 67.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

A FEMALE TEACHER'S STATEMENT OF HER WORK, AND ITS EFFECTS.

THE following statement of the experience of a pupil teacher will be read with interest at the present juncture:—

"Having been a student and teacher in public schools for the last ten years (from 1874 to 1878 as a pupil teacher, 1879 to 1880 as a student at college, and from that date to the latter end of 1883 as an assistant), I may state that my health has quite broken down in the work, indeed so much so that it is with deep regret I have been compelled to give up all idea of again following my profession. The reason of my impaired health has, I am assured upon first-class medical authority in London, arisen almost entirely from too great a strain of work, and I will here give a brief detail of the labours that fell to my lot as pupil teacher. At the age of fourteen I entered my apprenticeship and served a period of five years. During the summer months I had to be at the school at 7.30 in the morning (which necessitated my rising at 6 o'clock) to receive an hour's instruction from the head mistress, the amount of instruction each week amounting to six hours. During the winter months this time was altered to two hours on three evenings in each week. Each day from 9 to 12 A.M. and from 2 to 4.30 P.M. was spent in actual teaching, the number of pupils taught in the various classes averaging from fifty to sixty. At the end of each year an examination was held to test the ability of the teacher in specified subjects. In order to pass this examination successfully careful study was required, which study had necessarily to be accomplished out of school hours. I may safely say that I never left school at the close of the day without feeling worn out in body and mind, and quite unfit for the evening work, which had to be accomplished, if I wished to pass the examination creditably and fit myself for the retaining of my appointment. Actual teaching per day averaged five hours and a half. Tuition and private study three to four hours per day (this compulsory five days a week). On Saturday, although nominally free, two or three hours were devoted to study. Week-day meals, in summer: Breakfast, before 7.30; dinner, between 12.30 and 1.45. Daily exercise: Walk to and from school."

Nemo.—About five weeks is regarded as the average time.

Dr. Strahan (Berry-wood).—Yes, soon.

THE SERVICES AND MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—With reference to the Medical Bill, the succeeding few remarks may not be inappropriate to the contention which is rife between the medical licensing bodies. In the competition for the public services all medical graduates meet on equal terms, and, as the army draws the largest number, I have taken from the army lists from 1862 to 1883 inclusive the names and qualifications of the two gentlemen at the head, and of the two at the bottom, of the ranks, at each examination for this period. There are sixty-six in each category. In the case of an individual belonging to different corporations I give the first as the one to which the party is assigned. The result is the following—viz.: The College of Surgeons of England gave twenty to the top and ten to the bottom; the English Universities four to the top and one to the bottom; the Scotch College of Surgeons four and six respectively; the Scotch Universities eleven and twelve respectively; Dublin University seven and seven; the Queen's University fourteen and eight; the College of Surgeons, Ireland, five and twenty-two respectively. It will be seen from these facts what corporations produced the highest percentage of good men, and what of mediocre men, at the army test. Genuine medical reform should be directed towards obtaining Poor-law, prison, lunacy, and sanitary medical officers by competitive examination, open to all graduates, promoting to inspectorships through the respective departments, and leaving the teaching and licensing bodies free. The public will in their own instance select the fittest according to fancy, judgment, and other influences.

I am, Sir, yours truly,

JOHN ROCHE, M.D.,
Kingstown, March 3rd, 1884. Retired Indian Medical Service.

THE DUTIES OF MEDICAL OFFICERS OF HEALTH.

Dr. Whamond.—Our contention is that it should rest with the responsible officer to decide what constitutes an outbreak of disease of a dangerous character, and what does not. A single case of one disease should at times be so regarded, but two or even three cases, either of the same or another disease, do not, apart from the circumstances under which they occur, necessarily constitute such an outbreak. Our reason for not publishing Dr. Whamond's former letter and documents appended was their great length. But with regard to his complaint that the statement we made last week as to his method of procedure as to the compulsory notification of disease was "unwarrantable," we now quote the passage in its entirety:—"It is pretty evident that, unless the general practitioner resists most determinedly, the increasing tendency to exact information, entailing responsibility, loss of time, &c., will steadily increase, and there is a likelihood that in each sanitary district a court composed of sanitary medical officers and an incompetent council will become an established institution to sit in judgment on our opinions. The power of diagnosing disease is all we have to represent the capital spent on our general education and professional training, and we must be prepared to show that even a tyrannical Act of Parliament cannot succeed in extorting this special knowledge from us. For fifteen months after this [i.e., being summoned for reporting "infectious disease," only a term Dr. Whamond wished to use to cover a whole class of disease; and later on, after difficulty had arisen, for reporting as small-pox a case differently diagnosed as small-pox and chicken-pox] I made no report. About this time the sanitary medical officer's monthly report showed a death-rate of 20 per 1000 from measles alone. This so far modified our councillor's opinions that they instructed the town clerk to request the medical men to report all cases of measles. I acknowledged their request by reporting three cases of measles as small-pox, cholera, and fever respectively," thus giving all the variety their interpretation of the Act permitted me to do with safety." ["It should be stated that the Jarrow Act gave a power to the corporation to extend its provisions to other diseases than the three named.] Later on Dr. Whamond adds, "No matter what fee is paid, I refuse to act as a specialist in diagnosing for the Town Council."

Dr. H. R. Bigelow (Washington, U.S.).—Our action in the matter must be confined to the expression of sympathy with our correspondent in his disappointment.

CHOLECYSTOTOMY.

To the Editor of THE LANCET.

SIR,—The recent publication of some cases of the above induces me to make a brief reference to two cases in which I tapped the gall-bladder. Both occurred in females; in both there was persistent jaundice, and in both there was a tumour of the size, and occupying the position, of the distended gall-bladder. There was no history, in either case, of biliary calculus. I opened both with the aspirator, and was greatly surprised to find, not bile, but mucoid contents. I could not account for the total absence of bile. There was no calculus in either sac, so far as could be [illegible]ly moving about the needle of the aspirator. I expected to have evacuated bile, and was cast into doubt by the nature of the contents. I see by Mr. Tait's case, published in the *British Medical Journal*, Nov. 18th, 1882, that the contents of the sac in his case were also of a mucoid kind. Some time after, Dr. Marion Sims of Paris published a little pamphlet on the subject, and I sent him particulars of my cases. I thought at the time, before the operations were performed, that the ducts might have been closed by some inflammatory process, and that they might be forcibly opened again by a long probe thrust up from the interior of the opened gall-bladder. These cases occurred some years ago, and I forget now what it exactly was that stayed my hand, but I believe it was the then established terror of tinkering with the peritoneum. After Mr. Tait's cases I could of course incise the gall-bladder and search for gallstones, or for closure of ducts, whenever similar cases should present themselves. It is unnecessary to add that the tapping in my cases did no harm; neither did it, lacking the bolder proceeding of Mr. Tait, effect good.—I am, Sir, your obedient servant,

Cashel, Feb. 1884. THOMAS LAFFAN.

Mr. Abbott.—The facts in any form will suit our purpose.

Dr. Roberts.—We do not recollect the passage.

DALRYMPLE HOME FOR INEBRIATES.

To the Editor of THE LANCET.

SIR,—With reference to the Home at Rickmansworth, permit me to state that I believe it would be a benefit to the medical profession if the medical officer of this institution would state to what extent morphia and chloral are exhibited therein, and how far the placid contentment of the four inmates who have cheerfully surrendered their liberty "for the full period of twelve months each" is due to the influence of these drugs. There are a great many chronic idiots now about, and I have seen several at the doors of coffee taverns presenting a vacant aspect. Query, are they discharged as cured after being rendered innocuous? Statement of the course of treatment adopted would be most satisfactory.

I am, Sir, yours truly,

York-road, Wandsworth, March 4th, 1884. J. C. RICHARDSON.

DO ANIMALS COMMIT "SUICIDE?"

No, certainly not in the sense of intentionally putting an end to their lives. There is not a particle of evidence of their intentional and purposed self-destruction. That animals may and do kill themselves in the endeavour to escape from torture is probable. That they may and do kill themselves in paroxysms of madness or rage is beyond question, but that they *rationally* destroy their lives we do not believe. If they could do so the streets and stable-yards of the metropolis would be full of bodies of cab and omnibus horses, the kennels full of dogs, and the areas full of cats which had committed self-destruction. The notion of suicide of animals below man is absurd and unphysiological. It is impossible to discuss it seriously.

L.R.C.P.L.—Vide Killick's Manual or Guide to the Examinations of the University of London. The so-called London Latin and Greek Grammars are highly recommended. Dr. Smith's smaller Latin-English Dictionary and Wright's Greek and English Lexicon are good.

WHITE LEAD OR PAINT IN ERYSIPELAS AND SUPERFICIAL INFLAMMATIONS.

To the Editor of THE LANCET.

SIR,—For some months past I have been trying various experiments so as to prove to my own mind whether there was anything superior to the quickly drying preparations, such as collodion, styptic colloid, &c., in the local treatment of superficial inflammations. I have no doubt now that common white paint is one of the most valuable preparations yet known for the local treatment of erysipelas, but it has the following objections:—1. We do not know the exact preparation we are using, therefore we cannot be certain as to deleterious adulterations. 2. Patients object to it on account of the common idea that paint is poisonous. 3. The difficulty of removing it from the part when the inflammation has subsided.

I have tried white lead combined with the following substances, with the results attached: With linseed oil only, no effect; with linseed oil and turpentine, no effect; with linseed oil, turpentine, and acetate of lead, useful; with varnish, no effect; with varnish and acetate of lead, useful; with varnish, acetate of lead, and sulphate of copper, useful; with varnish, acetate of lead, sulphate of copper, and sulphate of zinc, useful; with varnish, linseed oil, acetate of lead, sulphate of copper, and sulphate of zinc, the most perfect compound. For illustration I will relate the following case.

J. S——, aged thirty-eight, idiopathic erysipelas of forehead, extending down to the cheeks, nose, and ears. On the first day I painted over the forehead, down the right cheek, and over the nose. On the second day I extended it down over the left ear, and behind the ear and over the cheek. The patient desired me to paint the "stuff," as he called it, over the whole of the part affected, as he said the other part was so easy since my visit the day before. I only used it over the ear and behind the ear, leaving the left cheek free. On the third day inflammation behind the ear entirely stopped, and he was free from pain, but it had extended from the cheek to the chin. By persuasion of the patient, I consented to cover the whole of the inflamed surface, and he stated the effect was simply marvellous.

My successes have been so numerous that I now never go out visiting without a bottle of this preparation with me, so as to be ready for any emergency; and I only hope that others who may try it will have the same results.—I am, Sir, yours, &c.,

ED. OVERMAN DAY,
Assistant Surgeon to the Royal Hospital for Children
March 1st, 1884. and Women, Waterloo-road.

J. B. M.—The announcement is certainly unprofessional, but it may not have been authorised by the gentleman named therein.

Medicus.—Dr. Sheen, of Cardiff, has published a work of the kind.

"SNAKE-POISON."

To the Editor of THE LANCET.

SIR,—I am not quite sure whether Mr. Piesse had my letter in mind when he addressed you on the above subject last week. I should, however, like to repeat that the question I asked of your correspondents was founded on no hazy idea or theory of my own, but on certain biological facts, which may be briefly stated as follows:—The innocuousness of cobra poison on members of its own species, but which innocuousness is not extended to the non-poisonous members of the same colubrine family or section of snakes. From such facts surely one might reasonably infer that there is something in the cobra itself (probably in its blood) which can neutralise the fatal effects of its own poison.

I am, Sir, your obedient servant,
March 3rd, 1884. INCOGNITO.

"FACIAL NEURALGIA."

To the Editor of THE LANCET.

SIR,—In your issue of Feb. 23rd "A Constant Reader" asks for suggestions as to the treatment of a case of facial neuralgia without apparent cause. I would suggest that he should examine the external auditory canal, if he has not already done so, for inspissated or irritating secretions; neuralgia of the inferior dental nerve occasionally being a referred pain through the twigs of the auriculo-temporal branch of the inferior maxillary nerve distributed to the auditory canal.

I am, Sir, yours truly,
St. Barthol. Hosp., March 5th, 1884. JAS. NORMAN VOGAN.

LADY DOCTORS AND THE GRANT MEDICAL COLLEGE.

IT is stated that the experiment of admitting women to the lectures at the Grant Medical College is not proving very satisfactory. There are at present seven female students, four of Parsee and three of European extraction. The male students, nearly all of whom are natives, have not taken kindly to the innovation, and their disapprobation, at first confined to hissing the female students, has at length taken the form of actual violence. It is suggested that, if the Government are in earnest in desiring the education of medical women, they should provide separate classes—for some subjects, at all events, of the course.

Mr. Hillary R. Moullin.—A should have made it clear both to the coachman and to the coachman's master that he could not meet C, and that if it were desired that he (A) should take charge of the case, C should have respectful intimation that his services would not be further required. We assume, of course, that the coachman as well as his master wished for A's attendance, and that A has sound and sufficient reasons for refusing to meet C.

Dr. De Lisle (Napier, N.Z.).—Assuming the facts to be correct, there can be no doubt that Dr. Matthews was in error in giving an opinion upon a case still under our correspondent's care without a consultation, especially as his opinion was contrary to Dr. De Lisle's. Dr. Matthews' first letter was distinctly lacking in the courtesy due to a professional brother. We see nothing in our correspondent's conduct calling for adverse criticism.

Mr. J. Wright.—The qualifications apply to surgical and midwifery practice only. The Poor-law authorities can appoint persons with one qualification, but a double qualification is generally required. We can give no answer to the fourth question, which is a legal one.

ABNORMAL PRESENTATION AND DELIVERY.

To the Editor of THE LANCET.

SIR,—The letter of your correspondent, Mr. D. J. O'Keeffe, in your last number, calls for some remark. The fact of the membranes filling the vagina and reaching the vulva led him at once to diagnose that it was not "all right"—a curious statement. This surely occurs in a large number of cases, and would occur in the majority were not the membranes ruptured by the attendant. But his inference as to practice therefrom is still more curious—he therefore at once ruptured the membranes. This was surely an error if he did not know definitely the conditions of the case. Ought he not to have endeavoured to retain the membranes unruptured, with a view to bipolar version if necessary? He then found the presentation to be first cranial with a hand. In such cases we are told "he had always previously turned." It is to be hoped that he has not had many such cases. Would he not make one attempt to replace the hand, frequently a perfectly simple procedure? And, to wind up with, having determined on what he thought the real treatment required, he desists therefrom on the patient's and her friend's request, leaving the woman, as he leads us to suppose, or he would not have attempted version, to run into danger. Many practitioners of much less than fifteen years' experience must have seen many such cases of safe delivery without any interference.—I am, Sir, yours, &c.,

March 3rd, 1884. A. J. R.

To the Editor of THE LANCET.

SIR,—Having read Mr. O'Keeffe's letter in this day's LANCET, I think the treatment of two similar cases which I have had within the last six months may be of interest to him. In both cases I applied forceps, and found, by gentle traction, the hands slipped up over the head, and gave no further trouble. The mothers did well. Four months ago I had a case of twins. After the first child was born I found a foot in the vagina, and just above a head pressing into the brim. Thinking the foot belonged to a third fœtus (the mother's abdomen being still very large), I attempted to raise the head with the hope of being able to return the foot, but could not succeed. I therefore applied forceps and delivered, carefully watching the leg to prevent it injuring the mother. The leg was bruised, but sustained no serious injury. The child was well developed. The mother did well.

I am, Sir, yours faithfully,
GEORGE H. W. THOMAS, M.R.C.S.
New North-road, N., March 1st, 1884.

To the Editor of THE LANCET.

SIR,—In your issue of the 1st inst. I noticed a letter by Dr. D. J. O'Keeffe with reference to "an abnormal case of presentation and delivery," which I read with interest, having had one similar case myself. Last September I was called to attend Mrs. W——, about 7 P.M., in her second confinement. She was very nervous, knowing what a "severe" time she had before; still she had confidence in me. Having made an examination per vaginam, I found the membranes ruptured, os well dilated, pains good, presentation head, with right hand projecting over the right parietal bone. I put back the hand in position, keeping it so whilst I applied the upper blade of the forceps, adjusted the other blade, and delivered. The infant was weak. Inspiration prolonged, from asphyxia. It rallied, after a warm bath, combined with external friction, with brandy. It is now a fine baby.

I am, Sir, yours truly,
Sheffield, March 4th, 1884. H. R. PEARL.

F.—A medical officer of health has no right in virtue of his office to enter any house for the purpose of examining a patient; but with the consent either of the patient or of the patient's friends he, as well as anyone else, can of course do so. But it is most important that any such method of procedure should be avoided except it be carried out in harmony with the practitioner in attendance. Unfortunately there have been isolated cases where a medical officer of health has had just cause for suspecting that he has been misinformed as to the nature of an infectious disease, and it may be that he might feel it a part of his duty to ascertain the real facts with a view to the protection of the public, whom he serves. Even in such cases we would counsel that nothing but grave necessity should induce him to make such a visit except with the concurrence of the medical man in attendance, and after every effort has been made to secure the needed information.

Dr. Richard Neale.—We wrote from a broad standpoint, and what we said undoubtedly holds good. No doubt the practice has been largely used, as a reference to the Medical Digest will prove.

Dr. T. F. Pearse.—The question is hardly clearly enough put to admit of a definite reply. Surely no respectable office would refuse to pay their "usual" fee.

"FEVER HOSPITALS."

To the Editor of THE LANCET.

SIR,—In reply to "A. B. C.," I would say by all means persist in your endeavour to get a fever hospital erected. I make this answer in consequence of having succeeded in inducing a rural sanitary authority for whom I act to build such an institution some eight years and a half ago, since when the boon conferred on the neighbourhood by the existence of such a building has been exemplified over and over again. With regard to the fears expressed that if a medical man visited a fever hospital "he would lose his other patients," I know they are groundless. As to the suggestion "that if a fever hospital were erected, yet in practice it would be of little use," I would say that such an expression of opinion is diametrically opposed to my experience. Since the hospital I refer to has been built, no less than 430 patients have been admitted, and this, too, where the building, though sufficient for the requirements of an agricultural district, is far from attractive. Times without number the fever hospital I speak of has prevented the so-called "preventable diseases" from assuming extended proportions in this district, and last year alone no less than thirteen outbreaks of scarlatina did not spread to a second member of the families invaded, in consequence of the patients having been speedily removed to the institution. Very many of those admitted were children under ten years of age, and no evil consequence has attended their removal, although sometimes a distance of six miles had to be traversed. The fever hospital I allude to has become so popular among all classes here that I never experience any difficulty in persuading even mothers to send in their children. Two other local authorities with whom I am officially connected are so impressed with the success of this hospital that ere long their districts will possess a similar safeguard against "dangerous infectious diseases."

I am, Sir, yours faithfully,
G. H. FOSBROKE, S.Sc. C. Camb.,
Medical Officer to the Stratford-on-Avon Combination
Bidford, March 3rd, 1884. of Sanitary Authorities.

ENLARGEMENT OF THE MAMMARY GLANDS IN AN INFANT.

To the Editor of THE LANCET.

SIR,—The following case may be of interest to your readers:—

Mrs. T——, a patient of mine, was on the 6th inst. confined of a healthy female child. On the 10th the nurse noticed that the child's breasts were swollen, and called my attention to them. On seeing the child I found both mammary glands symmetrically enlarged to the size of walnuts, with a slight blush on the skin over them. There was no enlargement of the axillary glands; the child was to all appearance in perfect health. The glands were quite painless, and the infant did not object to their being freely handled. I should be glad if any of your correspondents who have met with similar cases would state what treatment was resorted to, and with what effect. The child's condition is the same now as it was when I first saw it.

I am, Sir, yours truly,
Cornwall, March, 1884. HERBERT WHITLEY, M.R.C.S.

Mr. T. Moore (Blackheath).—The case may safely be left in the hands of Mr. Forder.

"INTRACTABLE HEARTBURN, &c."

To the Editor of THE LANCET.

SIR,—In answer to "A Young Practitioner," whose letter appeared in your issue of Feb. 2nd, I would suggest the following line of treatment:—To give up the use of alcohol entirely, especially beer and stout. If in the habit of taking tea, to leave this off, and to take cocoa instead. As medicine, bismuth in five-grain doses twice or three times a day, and a pill containing a quarter of a grain of podophyllin, with a little rhubarb and extract of hyoscyamus occasionally. If "A Young Practitioner" is in the habit of missing the usual hour of meals, I can strongly recommend the use of a little milk, with a little rum to preserve it, say half a teaspoonful of the latter to an ounce of the former, to be taken at intervals of two or three hours while on a journey. It would be interesting to know whether he has any gouty tendency.

I am, Sir, yours faithfully,
Feb. 25th, 1884. M.R.C.S.

THE GROCERS' LICENCES.

To the Editor of THE LANCET.

SIR,—I cannot but think that your strictures on Mr. Kennard's Bill are based on some misconception of the present state of the law. There is no law having exclusive regard to grocers' licences, but such licences are taken out under the law which permits persons carrying on other trades to take out licences for the retail sale of spirits and wine for consumption off the premises. If, therefore, what you have always advocated is to be secured, it must be done by repealing this law; and such is the object of Mr. Kennard's Bill, so far as relates to the sale of spirits. I do not suppose that you would like drapers, as well as other trades, to retain the privilege of taking out such licences when grocers were prevented doing so.—I am, Sir, your obedient servant,

Constance Villa, Upper Tooting, S.W., DAWSON BURNS, D.D.
March 4th, 1884.

*** We are quite aware of the facts, but the Church of England Temperance Society knows perfectly well that the Bill means more than it says. This has, indeed, been acknowledged by the Society.—ED. L.

Mr. J. A. Bright is referred to THE LANCET of Dec. 9th, 1882, p. 993.

Mr. Child.—We do not prescribe.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Campbell Brown, Liverpool; Sir W. Mac Cormac; Mr. J. A. Bright; Mr. Chesshire, Birmingham; Dr. Davison, Buenos Ayres; Dr. Porter, Sheffield; Dr. J. Roche; Dr. T. Barlow, London; Mr. V. Richards, Goalundo; Mr. Hadley, London; Dr. Stevenson; Mr. Dawson Burns, London; Dr. Latham, Cambridge; Dr. Kilner, Bury St. Edmunds; Mr. Cureton, Shrewsbury; Dr. M. Collins, Nottingham; Mr. Walter Buchanan, Chatham; Dr. Broadbent, London; Dr. Bralley, London; Mr. Pearl; Mr. W. Wallis, London; Mr. Barford, Wokingham; Mr. J. C. Richardson, London; Dr. Quinlan, London; Mr. Whitley, St. Agnes; Mr. Scott, Manchester; Dr. Clifford Allbutt, Leeds; Mr. Blackman, Montreal; Mr. H. R. Moullin, Lyss; Mr. F. Treves, London; Dr. Pearse, Liphook; Dr. Neale, London; Mr. W. F. Muir, London; Dr. Oliver, Newcastle-on-Tyne; Mr. G. H. W. Thomas, London; Mr. Fosbroke, Bidford; Dr. Whitford, Liverpool; Dr. Brown, Alexandria; Mr. Swayne, Notting-hill; Mr. H. Campbell, London; Mr. T. B. Browne; Dr. Dickson, Buxton; Mr. Fielden, Chichester; Mr. Hopwood, Stow-on-the-Wold; Mr. Hamman; Mr. Kynaston, Folkingham; Mr. Higgins, Peel; Messrs. Savory and Moore, London; Mr. Falkner, Louth; Mr. Crewes, Truro; Dr. G. Harley, London; Dr. Andrew, Egham; Dr. Woakes, London; Dr. Philip, Monaco; Amor Hath Dos, Fatchpur; Mrs. Warton, Halifax; Mr. Deirs, Brisbane; Mr. Griffith, Moraddad; Messrs. Denman and Co., London; Mr. Jupp, London; Mr. Fletcher, London; Mr. Draper, London; Mr. H. D'Arcy Power, Deptford; Dr. De Havilland Hall, London; Dr. W. M. Collins, London; Mr. Brito, Edinburgh; Mr. Godlee, London; Mr. Rayner, Liverpool; Mr. Holm, London; Dr. White, Chartham; Dr. Hilliard, Aylesbury; Dr. C. J. B. Williams, Cannes; Dr. F. Rothera, Berlin; Mr. Ludlow, London; M. Durand, Paris; Dr. O. Will, Aberdeen; Mr. Vogan, London; Mr. A. Watt, Aboyne; Mr. Joy, North Weld; Mr. Sandford, Storrington; Messrs. Dawson Brothers, Montreal; Messrs. Wood and Co., New York; Mr. Wilson, Bishop Auckland; Mr. Willey, Birmingham; Mr. Coleman, London; Mr. Brurton; Miss Cooney; Dr. Lionel Beale, London; Mr. Abbott, Braintree; Dr. Roper, London; Mr. Mells, London; Mr. Rushton Parker, Liverpool; Medicus, Taunton; H., Manchester; L., Saxmundham; T. F., Oldham; Puzzled; Nemo; A Rejected Candidate; J. N. H.; Medicus, Ely; Incognito; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Holmes, Southam; Dr. More, Rothwell; Mr. Hicks, Truro; Mr. Duckworth, Accrington; Mr. H. Kimpton, London; Mr. Hathaway, Hayes; Mr. Hall, Bridgnorth; Dr. Millman, Ontario; Mr. Bury, Wrexham; Miss Truth, Cambridge; Dr. Clark, Folkestone; Mr. Dwyer, Cairo; Mr. W. Jones, London; Mr. Minshalls, Oswestry; Mrs. Tinsley, York; Mr. Gurner; Mr. Lyle, Shacklewell; Messrs. Jackson and Parker, Louth; Mr. Sheehy, Ebbw Vale; Miss Stratton, Brighton; Mr. Jones, Shelton; Mr. Middleton, Scarborough; Mrs. Carless, Liverpool; Mr. Buckley, Balloe; Mr. Walker, Birkenhead; Miss Hindemarch, Scarborough; Dr. Braye, Whitechapel; Mr. White, Bayswater; Dr. Heelas, Hampstead; Dr. Masken, Romsey; Mr. Ross, Egham; Mr. Brooking, London; Mr. Hopkins, Brixton; Mr. Square, King's-bridge; Mr. Frent, Folkestone; Mr. Armstrong, South Shields; Mr. Swann, Notting-hill; Mr. Mitchell, Norwich; Mr. Robertson, Broad Ford; Dr. Garrard, Wood-green; B. C., Wigan; M. Q.; X. P.; L.R.C.P.L., Gloucester; F. W. E., Old Brompton; Medicus, Liverpool; Alpha, Edinburgh; A. B., Dulwich; Medicus, Gray's-inn F. W.; Medicus, Blackpool; Lady Superintendent, Cambridge M.D., Caledonian-road; M. W., Tunbridge; C.; G. B. W.; Alfred; Iota; L.R.C.P. & S.; Alpha, Liverpool; M.R.C.S., Westgate-on-Sea; Energy, Uttoxeter; Epsilon, Leeds; Sanitas; Alpha, York; M.D., Newcastle-on-Tyne; Telephone, Leicester; E., Saxmundham; Lady Superintendent, Manchester; &c. &c.

Liverpool Daily Post, Earlestown Examiner, Liverpool Echo, Sunderland Herald, Cape Times, Galloway Gazette, Cheltenham Chronicle, &c., have been received.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, March 6th, 1884.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 29	29·95	E.	37	34	..	43	33	..	Cloudy
Mar. 1	29·98	S.E.	34	33	..	46	30	..	Hazy
,, 2	30·08	S.E.	40	38	..	44	36	..	Overcast
,, 3	29·95	S.E.	38	36	..	46	31	..	Overcast
,, 4	29·68	S.W.	46	45	..	52	36	0·18	Raining
,, 5	30·09	W.	42	40	..	52	29	0·03	Fine
,, 6	30·26	W.	40	38	..	50	36	..	Foggy

Medical Diary for the ensuing Week.

Monday, March 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Principal Types of the Human Species."
MEDICAL SOCIETY OF LONDON.—8 P.M. Dr. Corfield, "On the Connexion of Disease with Defective House Sanitation."

Tuesday, March 11.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 P.M., and Thursdays at 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Gamgee, "On Animal Heat."
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. A. L. Lewis, "On the Longstone and other Prehistoric Remains in the Isle of Wight."—Admiral F. S. Tremlett, "On the Cromlec of Er Lanic."—Mr. W. J. Knowles, "On the Antiquity of Man in Ireland."—Mr. H. Prigg, "On a Portion of a Human Skull of supposed Palæolithic Age from near Bury St. Edmunds."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Dr. Champneys' Fourth Contribution "On Artificial Respiration in Stillborn Children; an Experimental Inquiry."—Mr. J. B. Sutton, "On the Value of Systematic Examination of Stillborn Children."

Wednesday, March 12.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.—Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Principal Types of the Human Species."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lecture: Dr. Clifford Allbutt, "Chapters on Visceral Neuroses."
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Professor Ables, "On the Distance of Distinct Vision."—Mr. T. B. Rosseter, "Further Observations on Stephanoceros Eichhornii."
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. George Gulliver, "On Etiology and Pathology of Cholera."—7.30. Council Meeting.
HUNTERIAN SOCIETY.—7.30 P.M. Council.—8 P.M. Mr. Poland, "On a Case of Acute Suppuration of the Hip and Elbow-joints."—Dr. G. H. Savage, "Cases on the Borderland of Insanity and their Treatment."

Thursday, March 13.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
ROYAL INSTITUTION.—3 P.M. Professor Tyndall, "On the Older Electricity."
THE PARKES MUSEUM OF HYGIENE.—5 P.M. Dr. Henry Veale, "On Organisation and Management of Field Hospitals."
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Living and Card Specimens.—8.30 P.M. Mr. Hartridge, "Tumour of Choroid."—Mr. R. Marcus Gunn, "Case of Arterio-Venous Communication on the Retina."—Mr. A. Stanford Morton, "Hæmorrhage in Region of Macula."—Mr. Adams Frost, "An Artificial Eye."—Dr. H. H. Benson: (1) "A Case of Coloboma of the Iris;" (2) "Drawings of Ophthalmic Cases."—Mr. Nettleship: (1) "Case showing Blood-vessels in the Vitreous;" (2) "Lymphatic Nævus of Orbit and Eye;" (3) "Central Senile Guttate Choroiditis;" (4) "Central Senile Areolar Choroidal Atrophy;" (5) "Thickening of Retinal Vessels in a Case of Glaucoma."—Mr. S. Snell, "Two Cases of Retinal Glioma, in one of which Shrinking of the Eyeball occurred without Perforation."—Dr. G. A. Brown, "A Case of severe Conjunctivitis, with formation of Membrane on the Cornea."—Mr. M'Hardy, "Observations which appear to indicate a means of reducing the danger from Malignant Glaucoma while increasing the efficacy of Iridectomy in the Treatment of Chronic Glaucoma."—Mr. G. E. Walker: (1) "Acute Glaucoma of four weeks' duration, with Recovery of good Vision:" (2) "Sympathetic Ophthalmia, Evulsion of False Membranes and part of Iris; Recovery of good Vision—with living specimens."—Dr. Gowers, "On some Cases of Spasm of the Ocular Muscles."—Dr. D. M'Keown, "On a means of Diminishing the Blindness from Purulent Ophthalmia in Infancy."—Dr. A. H. Benson, "On Jequirity and its value as a Therapeutic Agent".—Mr. R. M. Gunn and Dr. J. Anderson, "A Case of Nerve Disease with Ocular Symptoms, including alleged Uniocular Diplopia."—Mr. Nettleship: 1. "Cases of Recovery from Amaurosis in Infants;" (2) "Cases of Retro-ocular Neuritis."

Friday, March 14.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Principal Types of the Human Species."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lecture: Dr. Clifford Allbutt, "Chapters on Visceral Neuroses."
ROYAL INSTITUTION.—8 P.M. Mr. J. N. Langley, "On Mesmerism."
CLINICAL SOCIETY OF LONDON.—Dr. S. West, "On a Case of Multiple Hepatic Abscesses in a Boy."—Mr. Butlin, "On a Case of Foreign Body in the Œsophagus; Œsophagotomy."—Dr. Finlay, "On Cases of Enteric Fever associated with Rheumatism."—Mr. Davis-Colley, "On a Case of Dislocation of the Spine."—Living Specimens: Perforating Ulcer of the Foot, by Mr. Edmund Owen; Dislocation of the Patella, by Mr. Golding-Bird.

Saturday, March 15.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Captain Abney, "On Photographic Action."

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The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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